

**EFFECTIVENESS OF CAPACITY BUILDING PROGRAM ON POSITIVE  
THERAPY FOR MANAGEMENT OF STRESS IN INFERTILE WOMEN  
UPON THE KNOWLEDGE AND SKILLS OF  
NURSING STUDENTS**

**BY**

**POONTHALIR VIJAYAKUMAR**

**A DISSERTATION SUBMITTED TO THE TAMILNADU DR.M.G.R MEDICAL  
UNIVERSITY, CHENNAI, IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF  
MASTER OF SCIENCE IN NURSING  
OCTOBER 2016**

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NURSING STUDENTS**

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## **DECLARATION**

I hereby declare that the present dissertation entitled “**Effectiveness of Capacity Building Program on Positive therapy for Management of Stress in Infertile Women upon the Knowledge and Skills of Nursing Students** ” is the outcome of the original research work undertaken and carried out by me under the guidance of **Dr. Latha Venkatesan.**, M.Sc (N)., M.Phil(N)., Ph.D(N),MBA, Principal, Apollo College of Nursing and **Mrs. Dhanalakshmi.**, M.Sc (N).,Reader Department of Obstetrics and Gynaecological Apollo College of Nursing, Chennai.

I also declare that the material of this has not formed in anyway, the basis for the award of any degree or diploma in this University or any other Universities.

**M.Sc (N) II Year**

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“Feeling gratitude and not expressing it, is like wrapping a present and not giving it”

- William Arthur

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## **SYNOPSIS**

**“An Experimental Study to assess the Effectiveness of Capacity building program on Positive therapy for Management of Stress in Infertile Women upon the Knowledge and Skills of Nursing Students at Apollo College of Nursing, Chennai.”**

### **OBJECTIVES OF THE STUDY**

1. To assess the level of knowledge and skills among the control and the experimental group of nursing students in positive therapy for management of stress in infertile women.
2. To assess the effectiveness of the capacity building program on positive therapy for the management of stress in infertile women by comparing pre-test knowledge, skills and post-test knowledge, skills of nursing students.
3. To assess the level of satisfaction of the capacity building program on positive therapy for managing stress in infertile women in experimental group of nursing students.
4. To find out the correlation between knowledge and skills in nursing students on positive therapy for managing stress in infertile women in pre- test and post- test of control and experimental group of nursing students.

The conceptual framework of the study was developed on the basis of Imogene King's Goal Attainment theory. The study variable is knowledge and skills of the students on positive therapy were the dependent variables and capacity building program on positive therapy for management of stress of infertile women were

independent variable were formulated. An extensive review of literature has been made based on the opinion of experts.

A true experimental pre-test and post-test research design was adopted for conducting this study. This study was conducted at Apollo College of Nursing, Chennai. A sample size of 98 nursing students who met the inclusion criteria were chosen by using the total enumerative sampling technique.

The data was collected by using tools such as demographic variable proforma, structured questionnaire, check list on positive therapy, level of satisfaction scale and level of skills on positive therapy. The data collection was done with the help of the self administration method for a period of one week. Study participants were gathered in a class room. An assurance was given regarding the confidentiality before the data collection procedure; consent was taken by researcher from the subjects to participate in study.

Structured questionnaires were administered to the participants and their level of knowledge was assessed in both the control and the experimental groups before intervention. The capacity building program on positive therapy was then administered to the experimental group using the lecture cum demonstration method.

After a week of intervention (experimental group) level of knowledge and skills were assessed by the use of same structured questionnaires in both the control and the experimental groups. The level of satisfaction regarding capacity building program on positive therapy was also assessed using the satisfaction rating scale on positive therapy. The level of skills regarding positive therapy was also assessed using the check list.

### **Major Findings of the study were**

- A Majority of the nursing students were less than 20 years (85 %, 75.5 %), More than half of the students were Hindus ( 53% 63%), Most of the students were from Tamilnadu (63% 77 %), Most of the students did not have a previous knowledge about positive therapy (69% 61%) and prior knowledge about infertility (45% 18%) in control and experimental group respectively.
- Nurses play a vital role in the promotion of health, prevention and treatment of illness. So this study was conducted among the student nurses for determining the extent of the knowledge and skills among nursing students in positive therapy for management of stress in infertile women. Study findings revealed that a majority of them did not have adequate knowledge (67.3, 90%) in pre and post test respectively. In the experimental group, most of the students did not have adequate knowledge (69.3%), in pre- test whereas in post-test a majority of them had adequate knowledge (85.7%) .
- The difference in mean and standard deviation of knowledge scores of nursing students between pre-test and post-test is (M=17.57, 17.06 SD= 3.04 3.09) was not statistically significant ( $p>0.05$ ) in the control group, whereas in the experimental group the difference in mean and standard deviation (M=17.97 31.9 SD= 2.81 3.19) was statistically significant ( $p<0.05$ ) between pre-test and post-test i.e. Post-test Knowledge score was high in the experimental group when compared to the control group. In the level of skills on positive therapy a majority of the students were



excellent related to relaxation therapy (100%), exercise (100%), good in counselling (95.9%) and two students had average ability in counselling (4.0%) in the experimental group. It can be attributed to the effectiveness of capacity building program in positive therapy for management of stress in infertile women upon knowledge and skills of nursing students. Hence the null hypothesis Ho1 “there will be no significant difference in the level of knowledge, skills in control and experimental group of nursing students before and after administration of positive therapy” was rejected.

- The study findings revealed the presence of a positive correlation between knowledge and skills ( $p < 0.01$ ) in the first observation of positive therapy among nursing students in the experimental group. Hence the null hypothesis Ho2: “there will be no significant correlation between knowledge and skills of nursing students in pre-test and post-test of the experimental and the control group” was rejected.
- A majority of the students were highly satisfied (65%) while some were satisfied (35%) related to the positive behaviour therapy. A majority of the students highly satisfied (65%) with the effectiveness of positive therapy. And (59 %) of the students were highly satisfied with the researcher’s approach towards teaching positive therapy in experimental group.

## **Recommendations**

- The study can be conducted on a larger sample for generalizing the results.
- The study can be replicated in different settings.
- The impact of the positive therapy upon students to reduce the stress level can be studied.
- The capacity building program on positive therapy for reducing the stress level among infertile women can be studied.
- The same study can be conducted in different levels of students e.g. Post basic B.Sc, M.Sc I year nursing students, Post Diploma students etc.

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## **CHAPTER - I**

### **INTRODUCTION**

#### **Back ground of the study**

**“Yet you brought me out of the womb; from birth I was cast upon you; from my mother’s womb you have been my God”**

**- Psalm**

Infertility is a world-wide problem affecting people of all communities, though the cause and magnitude may vary with geographical location and socio-economic status. Infertility causes stress among women which affects their life resulting in infertility treatment failure (WHO 2006).

In planning a life together, most of the couples have a vision about how their life should be, and they wish to have children of their own for the future life. When fertility fails, the couples become psychologically depressed; some feel frustrated and feel guilty whereas some others get angry about their fate and blame each other for the failure. Instead, couples can begin to view themselves constructively rather than viewing their fertility as failure.

The problem may be associated with male factor infertility (35-40%) or female factors (40%) or both. Male factors affect the quality and quantity of the sperm whereas female factors may include hormonal disturbances that may causes an ovulation or a problem within the reproductive system that may interfere with transportation of the egg or sperm. Age is also becoming an influencing factor for both men and women.



In India motherhood is highly valued and childlessness has devastating consequences for women because the blame for infertility is squarely laid on the woman. There is a need to highlight to the public, the fact that infertility is a shared problem where the causative factor can be present in the man, in the woman or both.

WHO (2012) epidemiological studies estimate that 60 to 80 million couples worldwide currently suffer from infertility. It varies across regions of the world and is estimated to affect 8 to 12 per cent of couples worldwide. Underlying these numbers exist a core group of couples, estimated to be three to five percentage, who are infertile due to unknown or unpreventable conditions. Among Indian women reporting primary infertility prevalence has been high. The WHO estimates the overall prevalence of primary infertility in India to be between 3.9 and 16.8 per cent. Estimates of infertility vary widely among Indian states from 3.7 per cent in Uttar Pradesh, Himachal Pradesh and Maharashtra, to 5 per cent in Andhra Pradesh, and 15 per cent in Kashmir. Moreover, the prevalence of primary infertility has also been found to vary across tribes and castes within the same region in India.

One of the most challenging aspects of the infertility experience is dealing with the emotional ups and downs relating to medical treatment, the uncertainty about outcomes, and the challenge of having to make important decisions such as when “enough is enough.” It is important to learn how to take care of oneself and to manage emotions so that self-esteem and the outlook on life remains positive.

While stress does not cause infertility, infertility most definitely causes stress. Infertile women report higher levels of stress and anxiety than fertile women, They are also more likely to become depressed.

Researchers have made a study of the perspective of infertility, stress and coping has found that women with infertility issues a high level of anxiety, stress and depression. Women are unable to overcome or cope up with infertility related stress due to inadequate or lack of coping strategies. Various coping mechanisms are used by the mother to adapt to the existing situation.

There are numerous methods for decreasing stress, including learning relaxation techniques and stress management strategies.

The government of India rightly consider prevention and management of infertility as a part of the reproductive and child health programme in the country. However, the existing scenario depicts unaffordability due to expenses on infertility services by the individual or family.

A person with negative perception will also have negative thoughts, which, in turn lead to negative beliefs, which are more often rational. These negative beliefs in the long run affect a person's mental health as well as physical health.

Positive therapy aims at modifying negative thought's beliefs, emotional and behaviour by using a number of techniques like relaxation therapy, counselling and exercise.

Positive therapy helps replacement of debilitating negative thoughts with positive self-enhancing thoughts it helps in the development of positive personality traits such as courage, confidence, cheerfulness, optimism etc, enabling them to face their problem with smile.

Positive therapy was developed by Natesan (2000) a psychologist and is widely used to reduce stress in hospitalized patients diagnosed with various ailments. It is assumed that when negative thoughts get replaced by positive thoughts, infertile women can become more realistic and reasonable in their perception thus understanding of stress of infertile women can therefore help nurses to design successful interventions to reduce stress, promote healthy adaptation and prevent them moving towards avoidance and denial.

### **Need for the Study**

Infertility is the inability to naturally conceive, carry or deliver a healthy child. The World Health Organization definition based on 24 months of trying to get pregnant is recommended as the definition that is useful in clinical practice and research among different disciplines. All over the World it affects an estimated 10%-15% of couples of reproductive age. In recent years, the number of couples seeking treatment for infertility has dramatically increased. There is not much information on effective psychiatric treatments for this population. However, there is some data to support the use of psychotherapeutic interventions. The stress of the non-fulfilment of a wish for a child has been associated with emotional sequel such as anger, depression, anxiety, marital problems and feelings of worthlessness among the parents.

In general, among infertile couples, women show higher levels of distress than their male partners. Various research studies support the theory that distress is associated with lower pregnancy rates among women pursuing infertility treatment. Since psychological factors play an important role in the pathogenesis of infertility, exploration of this is also an important task for managing this devastating problem, which has cultural and social impact.

WHO (2012) infertility taskforce estimates a prevalence among about 180 million couples worldwide currently suffering from infertility. Infertility varies between regions of the world, with primary infertility are 80 million and secondary infertility among 100 million. In developed countries, no demonstrable causes for infertility (39%), sexual dysfunction (1%), congenital abnormalities (1%), Tubal factors (27%), Acquired non-tubal factors (10%) and Endocrine disturbances (35%).

Motherhood is viewed by most of the women as their pivotal role and completeness of life and the thought of not achieving it can be very upsetting for women who have been raised to view motherhood as their primary role. Many infertile feel that they cannot imagine a life without children and that their childless status makes it difficult to maintain friendship with other women who have children.

Thus there is a need for developing strategies for reducing stress in infertile women. In India, there is only limited research literature available pertaining to psychological interventions for infertility. Research studies are done individually to evaluate the effect of relaxation therapy, counselling and other types of measures to relieve stress. But there are limited studies for evaluations of the combined effect of

relaxation therapy, counselling and tension releasing exercises. It is also observed that less attention is paid in the clinical area while dealing with infertile women to understand their stress levels, support measures and treatment seeking behavioural patterns.

To be happy or sad is in one's own hands. Infertile women may have a tendency to think excessively about their inability to conceive and worry about them continuously. In positive therapy, women are made to understand that worrying about the past or the future is unnecessary and unwanted and unproductive of any results, women are asked to live in the present and enjoy the present. Positive therapy helps replacement of debilitating negative thoughts with positive self elevating thoughts.

It is presumed that changes in thoughts will automatically lead to changes in behaviour. Positive therapy helps in the development of positive personality traits such as courage, confidence, and cheerfulness. Optimism trains infertile women to face their problems with courage and smile. Positive therapy aims to reduce stress while, studies have identified the possibility of conception when stress is reduced. Hence the researcher was interested to study the impact of positive therapy upon the stress levels in infertile women.

Nurses, being partner in health profession, play a vital role in the promotion of health, prevention and treatment of illness, including taking care of women in distress due to childlessness. Hence the nursing students during their training, must be empowered to help in reducing stress and to improving such women's coping ability. Positive therapy which is one of the mind body exercise which includes (Deep breathing

practice, relaxation therapy with auto suggestion, tension releasing exercise, smile therapy, laugh therapy) which helps in reducing stress in infertile women.

When the nursing students are empowered to practice and teach positive therapy, they can, help in turns women to learn and practice this therapy which may bring positive results in terms of reducing stress leading to a good possibility of becoming pregnant, which is the ultimate aim of infertile women.

Thus the investigator is interested to empower the 2<sup>nd</sup> year B.Sc nursing students as they have maternity nursing in their 3<sup>rd</sup> year B.Sc nursing during which period they will be able to help infertile women by teaching positive therapy. Hence this study is designed to assess the effectiveness of Capacity building program on Positive therapy for Management of Stress in Infertile Women upon the Knowledge and Skills of Nursing Students.

### **Statement of the Problem**

An Experimental Study to assess the Effectiveness of Capacity building program on Positive therapy for Management of Stress in Infertile Women upon the Knowledge and Skills of Nursing students at Apollo college of Nursing, Chennai.

### **Objectives of the Study**

1. To assess the level of knowledge and skills among the control and the experimental group of nursing students in positive therapy for management of stress in infertile women.

2. To assess the effectiveness of the capacity building program on positive therapy for management of stress in infertile women by comparing pre-test knowledge, skills and pos- test knowledge, Skills of Nursing students.
3. To assess the level of satisfaction of the capacity building program on positive therapy for managing stress in infertile women in the experimental group of nursing students.
4. To find out the correlation between knowledge and skills in nursing students on positive therapy for managing stress in infertile women in pre-test and post-test of control and experimental group of Nursing students.

### **Conceptual and Operational Definition**

#### **Effectiveness**

It is defined as the degree to which some thing is successful in producing a desired result of success.

In this study, it refers to the outcome of capacity building program of the nursing students on positive therapy for management of stress in infertile women as evidenced through improvement of knowledge and skills in nursing students.

#### **Capacity Building Program**

It is a planned development of increasing knowledge, output rate, management, skill of an organization through training, for a selective group of people.

In this study, it refers to empowering the nursing students regarding positive therapy on management of stress of infertile women by using structured educational intervention which include lecture cum demonstration.

### **Positive Therapy**

It is one of the psychological interventions which facilitate sound mental health, leading to better adjustment through various Techniques. The sequence of the technique are :

- Deep breathing practice (5mins),
- Relaxation therapy (25mins),
- Stopping stress symptoms (5mins),
- Negative thought stopping (5mins),
- Instilling positive thought (Auto suggestion ) (5mins),
- Tension relieving exercise (5mins),
- Smile therapy (5mins),
- Laugh therapy (5mins),

Approximately 1 hour will be required to complete the therapy

### **Infertile women:**

Women of reproductive age who have not conceived after a year of unprotected vaginal sexual intercourse, in the absence of any known causes of infertility.

In this study, it refers to women who are unable to achieve pregnancy after a year of unprotected sexual intercourse.



**Nursing Students**

They are the students studying B.Sc nursing in any recognized institution.

In this study, nursing students are the female participants studying B.Sc nursing 2nd year at Apollo College of nursing.

**Knowledge**

The facts, information and skill acquired through experience and education.

In this study, knowledge refers to understanding of positive therapy among the students as measured by knowledge questionnaire.

**Skills**

The ability to do something well

In this study, the student will be assessed by redemonstration on positive therapy with the help of a checklist which was developed by the researcher.

**Assumptions**

- Infertile women are more vulnerable to stress.
- Persons have their own creative and reproductive power.
- The person is a bio-psycho – social being.
- A person's opinions and view points reflect his/her belief thinking and feeling.

### **Null hypotheses**

- Ho<sub>1</sub>: There will be no significant difference between pre and post intervention, knowledge and skills on positive therapy among nursing students.
- Ho<sub>2</sub>: There will be no significant association between knowledge and skills of nursing students with selected demographic variables in pre-test and post-test of experimental and control group.

### **Delimitations**

- The study was limited to the B.Sc nursing II year students studying at Apollo college of Nursing. Chennai
- The durations of the study was limited for 4 weeks

### **Conceptual frame work of the study**

The conceptual framework for a particular study is the abstract, logical structure that enables the researcher to link the findings to nursing's body of knowledge. It is developed from the existing theory and helps in identifying and defining the concept of interests and proposing relationships among them. The model gives a direction for planning research design, data collection and interpretation of findings.

The conceptual framework for the study is based on Imogene King's Goal Attainment Model (1989). The researcher has adopted this model for assessing knowledge and skills of nursing students in positive therapy for management of stress in infertile women upon the knowledge and skills of nursing students.

## **Perception**

A person gets energy imparted from the environment and stores it. The conceptual framework of the present study involves the interaction between the investigator and the nursing students, which includes perception, judgment and action on the part of the investigator as well as the nursing students.

The study assumes nurses being partners of health profession, play a vital role in promotion of health, and treatment of illness, including taking care of the women on distress due to childlessness. Hence thus the nursing students, during their training, must be empowered to help in reducing stress and improving their coping ability in dealing with stressors.

When nursing students are empowered to practice and teach positive therapy, they will in turns, help women to learn and practice this therapy which may bring positive results in terms of reducing stress. This has a better possibility of becoming pregnancy which is the ultimate aim of infertile women.

Finally, the nurses takes the action on developing a capacity building program on positive therapy for management of stress in Infertile women upon the knowledge and skills of nursing students.

**Judgment**

In this study, the investigator judges the capacity building program on positive therapy as useful for nursing students to manage infertile women during their training period.

**Action**

The investigator developed a structured educational intervention which includes lecture cum demonstration for empowering the nursing students regarding positive therapy on management of stress in infertile women.

**Reaction**

Reaction refers to the development of action on perceived choices for goal attainment. The action of both the investigator and the nursing students leads to reaction. The investigator made arrangements to assess the knowledge and skills regarding the capacity building program on positive therapy for management of stress in infertile women upon the knowledge and skills of nursing students through pre-test and post-test program for disseminating the informations.

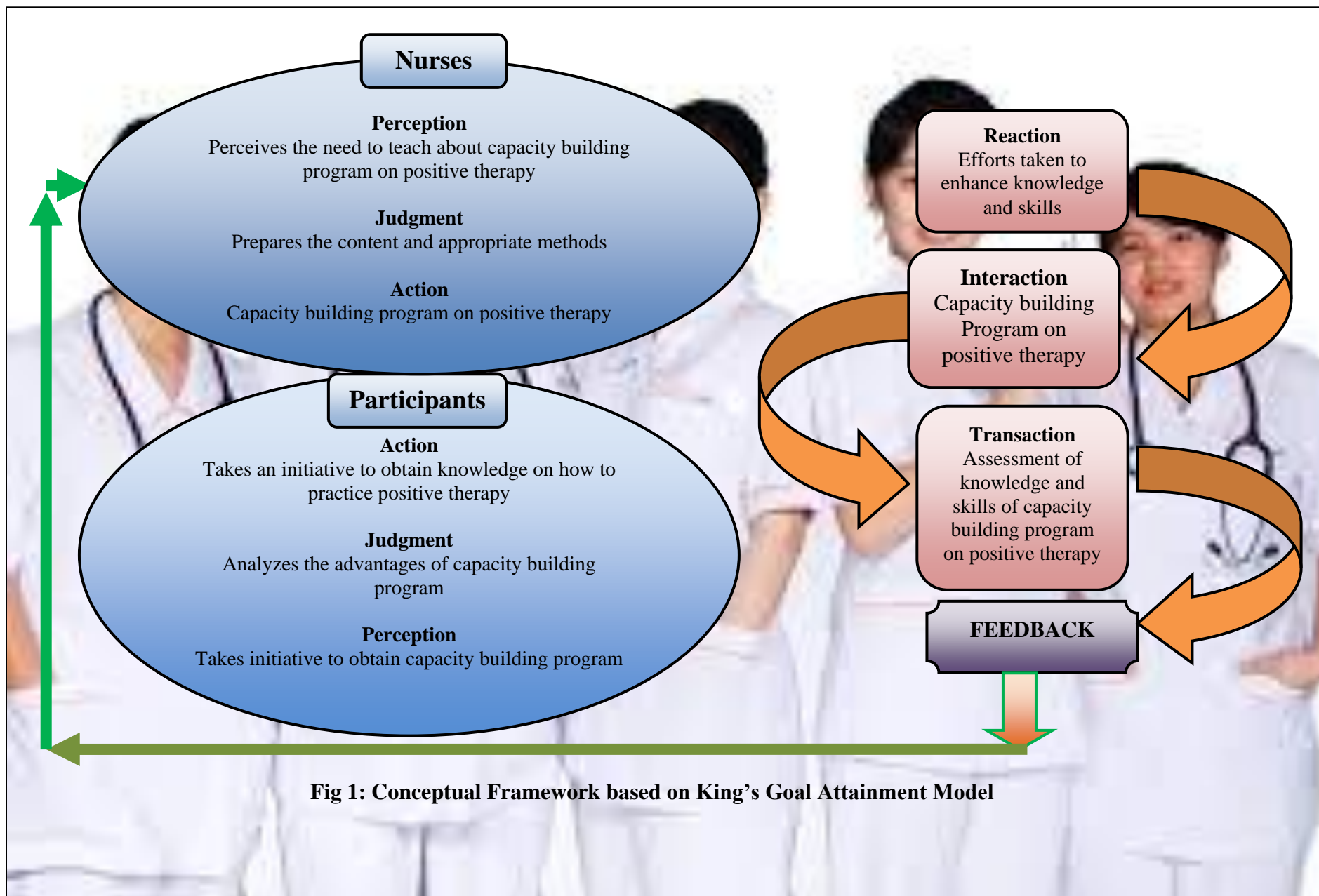
**Interaction**

Interaction refers to verbal and nonverbal behaviour between the individual and environment or investigator. It involves goal directed communication between the investigator and the nursing students.

**Transaction**

Imogene King says that transaction is the mutually identified goals of two or more individual and the means to achieve them. They reach an agreement about how to attain their goals and then set about to realize them.

The investigator and the nursing students worked has mutually to set goals in enhancing the knowledge and skills of nursing students in positive therapy for management of stress in infertile women.



**Fig 1: Conceptual Framework based on King's Goal Attainment Model**

## **Projected Outcome**

The projected outcome was increase in knowledge and skills of positive therapy for management of stress in infertile women among nursing students.

## **Summary**

This chapter deals with the background of the study, need for the study, statement of the problem, objectives of the study, assumptions, operational definitions, null hypothesis, inclusion criteria and exclusion criteria delimitation and conceptual frame work of the study.

## **Organization of report**

Further aspects of the study are presented in the following chapters.

**Chapter II:** Review of literature

**Chapter III:** Research methodology which includes research approach, research design, research setting, population, sampling, sampling criteria and development of analysis and research instrument.

**Chapter IV:** Analysis and interpretation of data is presented in terms of descriptive and inferential statistics.

**Chapter V:** Discussion.

**Chapter VI:** Summary, conclusion, implications, recommendations and limitations

## **CHAPTER -II**

### **Review of literature**

**“A great literature is chiefly the product of inquiring minds in revolt against the immovable certainties of nation”**

**-Mecken**

Literature review involves systematic identification, location, scrutiny and summary of written material that contain information on a research.

(Polit & Hunger 2007 )

**The Review of literature in this chapter has been presented under the four broad headings**

- Prevalence of infertility
- Stress among infertile women
- Impact of stress reduction strategic upon stress of infertile women
- Positive therapy and stress reduction

#### **Prevalence of infertility**

Infertility is the inability of a couple to achieve conception or to bring a pregnancy to term after a year or more regular unprotected intercourses. WHO (2012) it estimates that approximately 8-10 % of couples experience some form of infertility problems. This article explained that 50-80% million people suffer from infertility and the prevalence of infertility in men and women is almost identical. It also stated that infertility is exclusively a female problem (30 -40 % ).



Globally the prevalence of infertility has been estimated by Thonneu, et.al.(1991) was 13 -18 % in human population regardless of race, ethnic, group etc. Among this 67 -71 % have primary and 29 -33 % of patients have secondary infertility problems respectively. Normally a fertile couple has approximately 20% of chance of conception in each ovulatory cycle as per Nelson and Mashall (2004). They have explained infertility is a problem about 10 -15 % of reproductive aged couples.

Carcio (1997) has explained that the probability of becoming pregnant during each cycle of menstruation is 25% in normal fertile couples. The cumulative pregnancy rate during a 12 month period is 85%. He further explained that after 12 months of unsuccessful pregnancy, cause for infertility must be explored as the like hood of being fertile normally is reduced to 15%. Douglas (1991) said that couples in reproductive age group are affected to the extent of 10-15% due to infertility. In India female responsible for infertility is about 45 -59% of cases, of which 92 % are primary and 8 % are secondary. Herbert and marshal (2001) highlighted that the prevalence as infertility is relatively stable among the overall population, but increases with the age of the women, particularly in this older than 40 years.

Zargar Wani (2009) have conducted a study to assess the magnitude of primary infertility and to study its etiologic aspects in Kashmir, India. After proper randomization, 10,063 married couples were interviewed to ascertain the prevalence of primary infertility. A definitive protocol was followed for determining the etiology of primary infertility in 250 consecutive couples. Couples were married for  $\geq 1$  year; A logical investigative protocol was followed for identifying the etiology of infertility. Fifteen percent of the couples interviewed had primary infertility, among whom 4.66%

had unresolved infertility at the time of the survey. The etiology of infertility in 250 consecutive couples revealed a female factor in 57.6%, a male factor in 22.4%, combined factors in 5.2%, and an undetermined cause in 14.8%. It was concluded that Primary infertility is common and distressing a problem in India as in other parts of the world. Semen abnormalities (22.4%), anovulation (17.2%), ovarian failure (8.8%), hyperprolactinemia (8.4%), and tubal disease (7.2%) are common causes of infertility. The pattern of infertility in India is the same as in other parts of the world, except that infertile couples report late for evaluation.

Adamson (2011) has conducted a study among 897 sexually active women, aged 15-30 for a study to investigate infertility. A secondary data analysis of the baseline data was undertaken. Primary infertility was defined with reference mutual period of longer than two years, not using contraception and without a child. Logistic regression was used for examining factors associated with primary infertility. The study inferred that the mean age of the women was 25.9 years (range: 16-30 yr) and the prevalence of primary infertility was 12.6 per cent with 95% Confidence Interval. The main factor associated with primary infertility was HSV-2 seropositivity.

### **Stress among infertile women**

Stress is a state of affair involving demand on physical or mental energy. In the present dynamic society, stress become an integral aspect of an individual's life. Individuals are constantly influenced by internal and external environments and maintain system balance called coping mechanism.

The data was gathered using Lip's stress symptoms inventory and state-trait anxiety inventory while the statistically analysis was performed by using the chi-square and Mann-Whitney tests, and logistical regression for testing the association between response variables and considering risk factors. The result showed that stress was more frequent in the case group than the control (61.8 and 36.0) respectively. With respect to anxiety, there were no significant differences between case and control groups as to the median state score (39.5 and 41.0; respectively) and anxiety trait scores (44.0 and 42.0) the author concluded that infertile women are more vulnerable to stress.

A representative sample of infertile women in United Arab Emirates was taken up for measuring the quality of life and evaluating their socio cultural attitude. A study was conducted by Khayata,et.al.(2003). Parameters mostly affected were mood related in women above 30 years, with primary and female factors infertility and those in polygamous marriage. The quality of life did not affect sexual performance and was not affected by duration of infertility and cost of treatment. Counseling and continuing support of infertile women was therefore indicated to improve their quality of life.

Emotional distress in infertile women in Kuwait was studied by Fido (2004) identified that comparing with age matched pregnant control sample, 120 Kuwaiti infertile women exhibited significantly higher psychopathology in all Hospital anxiety and depression scale parameters in the form of tension, hostility, anxiety, depression ,self blame and suicidal ideation.

A study was conducted by Donor (2007) for investigating the relationship between the treatment perceived stigma and infertility – related stress. The data was

collected using face to face interviews in three languages with 615 women receiving infertility treatment in three health sites in south Ghana. The study findings revealed that majority (64%) of women in this sample felt stigmatized and also women with higher levels of education felt infertility-related stress. The author indicates that the social status of infertile women derived from highlighted the wider beneficial effects of improved educational opportunities for girls and women.

A cross sectional study was conducted by Emily Bartlett (2009) to assess the impact of infertility diagnosis on infertile women's level of anxiety, depression and fertility – related stress. The study involved 404 women undergoing fertility treatment in a public clinic in Athens. Women with male factors infertility had higher levels of state anxiety ( $p=0.007$ ) and social stress ( $p=0.007$ ) than women with female, mixed and unknown infertility. Women with idiopathic infertility also had higher levels of traits anxiety ( $p=0.001$ ). Thus, the psychological status of women is strongly related to the etiology of the infertility problem, and as a result it is necessary for women undergoing treatment for infertility to have an individualized psychological supports, based on their infertility problems.

### **Impact of stress reduction strategies upon stress of infertile women**

A systematic review was conducted by Bovin (2004) for determining the improvement in well-being and pregnancy rates through psychological interventions and to identify most effective interventions. The research identified all published and unpublished papers in any language and any sources that carried description of a psychosocial intervention with evaluation of its effect on at least one outcome measures in an infertile population. A total of 380 studies were analyzed and result showed the psychological intervention as more effective in reducing the negative effect than in the changing interpersonal function (eg marital and social functioning) pregnancy rates were unlikely to be affected by psychosocial intervention. Group intervention which had emphasized education and skills training (e.g. relaxation training) were found to be significantly more effective in producing positive changes across a range of outcomes than counseling intervention which emphasized.

A feasibility study was conducted by Cousineau,et.al. in 2007. Results strongly indicated that multimedia methods may serve as an effective innovative Psycho social interventions for infertility patients and overcome barriers of limited access to education and supports services.

A study was conducted by Yoon Frederiksen (2014) on efficacy of Psychosocial interventions for psychological and pregnancy outcomes in infertile women. In an experimental study, evaluation was done on 638 infertile women who were referred to a university infertility clinic and 140 couples with depression. Those with even numbers were assigned to psychological interventions before infertility treatment, while those

with odd numbers were assigned to psychological intervention. Both the groups received psychological interventions which state that effectiveness of Psychiatric interventions in increasing pregnancy rate, and as crucial to mandate psychiatric counseling in all fertility centers for diagnosis and treatment of infertile women with psychiatric disorder. A systematic review and meta –analysis suggest Psychological interventions for couples in treatment for infertility. In particular Cognitive – behavioral therapy, could be efficacious both in reducing Psychological distress and in improving clinical pregnancy rates.

### **Positive therapy and stress reduction**

Dhara and natesan (2003) have conducted a study on management of stress in primary school teachers through positive therapy among 60 female teachers selected in the age range of 25-36 years from the main feeder school and Vivekalaya School in Coimbatore, Tamilnadu 30 were assigned to the experimental group and 30 to the control group. Initially mean stress was high in both the groups. Positive therapy was given to two groups of 15 subjects in each group for 6 sessions on alternate days, the duration of each session being 40 minutes. Results revealed that positive therapy had helped in bringing down the mean stress significantly low level in the experimental group whereas in the control group the mean stress continued to be high.

Jayasudha (2011) has conducted a study on the impact of positive therapy upon stress levels in infertile women and found a majority of the women experiencing moderate to high level of stress and decreased levels of general wellbeing in the pre test, whereas after undergoing positive therapy the experimental group of women had low

stress and increased level of general well being in the post-test. The infertile women in the control group did not have any significant reduction in the stress or improvement in their general wellbeing.

Venkatesan (2008) has conducted a study on impact of positive therapy upon the stress levels in infertile women at the Centre for Reproductive Medicine at Apollo Hospitals, Chennai. 120 infertile women were assigned randomly to the control and the experimental groups. The Positive therapy was implemented to experimental group of infertile women during the follicular phase. The pre and post test stress levels were measured in both the control and the experimental groups on day 2 and day 14 of the menstrual cycle. The control group infertile women reported a mean stress score of 246.13 (SD = 21.82) in the pre-test and in post-test. It was found to be 247.06 (SD=21.89) and the difference was not statistically significant. The mode was 242 in the pre-test and was 248 in the post test. Whereas the experimental group women had their stress mean score of 247.51 (SD=23.14) in the pre test and after undergoing positive therapy it was found to be 164.30 (SD = 19.03) in the post test which was statistically significant at  $p < 0.0001$  level. The mode was 240 in pre test and 162 in the post test. In the experimental group the statistically significant difference between the pre and post test scores in all the dimensions of stress was identified. The results may be attributed to the effectiveness of positive therapy. The result of the study significantly projected well the level of stress reactions and general well being in infertile women and the effectiveness of the Positive therapy in terms of reducing the stress level and promotions of general well being as clearly with the implication for the Positive therapy

## **Summary**

This chapter deals with the review of literature related to the problem stated. The literatures were taken from the 16 primary sources. It helped the researcher to develop, tools, collect, organize and analyze the data.



### **CHAPTER III**

### **RESEARCH METHODOLOGY**

Methodology of research study is defined as the way the information is gathered in order to answer the research question or to analyze the research problem.

This study was conducted for assessing the effectiveness of the capacity building programme on positive therapy for management of stress in infertile women upon the knowledge and skills of nursing students at Apollo college of Nursing, Chennai. This chapter deals with the different steps undertaken by the investigator for the study. It involves the research approach, the setting, the population, the sample, the sampling technique, the selection of tool, content validity, reliability, pilot study, data collection procedure and plan for data analysis.

#### **Research Approach**

Research approach is the most significant part of any research. An Experimental research is an extensively applied form of research and involves finding out how well of a programme and the practice of policy are working (Polit,2013).

Its goal is to assess or evaluate the success of the programme. An experimental approach is considered most appropriate for the accomplishment of the objectives of this study as the researcher wanted to assess the effectiveness of capacity building program on positive therapy.

Hence the experimental research approach has been used in this study.

## **Research Design**

A research design incorporates the most important methodological design that researcher work has used in conducting a research study (Polit, 2013).

A **true experimental pre test and post test research design** was adopted for conducting this study.

**R   O<sub>1</sub>   -   O<sub>2</sub>**

**R   O<sub>1</sub>   X   O<sub>2</sub>**

R - Randomization of B.Sc (N) II year students to control and experimental group. Samples were divided according to their merit list (Marked scored in I year university exam )

O1 - Pre test of control and experimental group of B.Sc (N) II year students to assess the level of knowledge and skills.

O2 - Post test of control and experimental group of B.Sc (N) II year students to assess the level of knowledge and skills.

X- capacity building program on positive therapy.

### **Capacity building program on positive therapy**

A capacity building program for nursing students in positive therapy for management of stress of infertile women is suggested. This will help the students to gain authentic knowledge in positive therapy In this study it refers to the planned educational intervention which includes

- Deep breathing practices
- Relaxation therapy
- Stopping stress symptoms

- Negative thought stopping
- Instilling positive thought
- Tension relieving exercise
- Smile therapy
- Laugh therapy

This programme was administered for two hours comprising one hour teaching followed by one hour demonstration on positive therapy for the experimental group of B.sc (N) II year students by the investigator at auditorium of Apollo college of nursing.

### **Variables**

Variable is an attribute that varies, taking on different values (Polit, 2013).

#### **Dependent Variables**

The variable hypothesized to depend on or be caused by independent variables is the dependent variable (Polit & Beck, 2012). In this study, knowledge and skills of the students on positive therapy were the dependent variables.

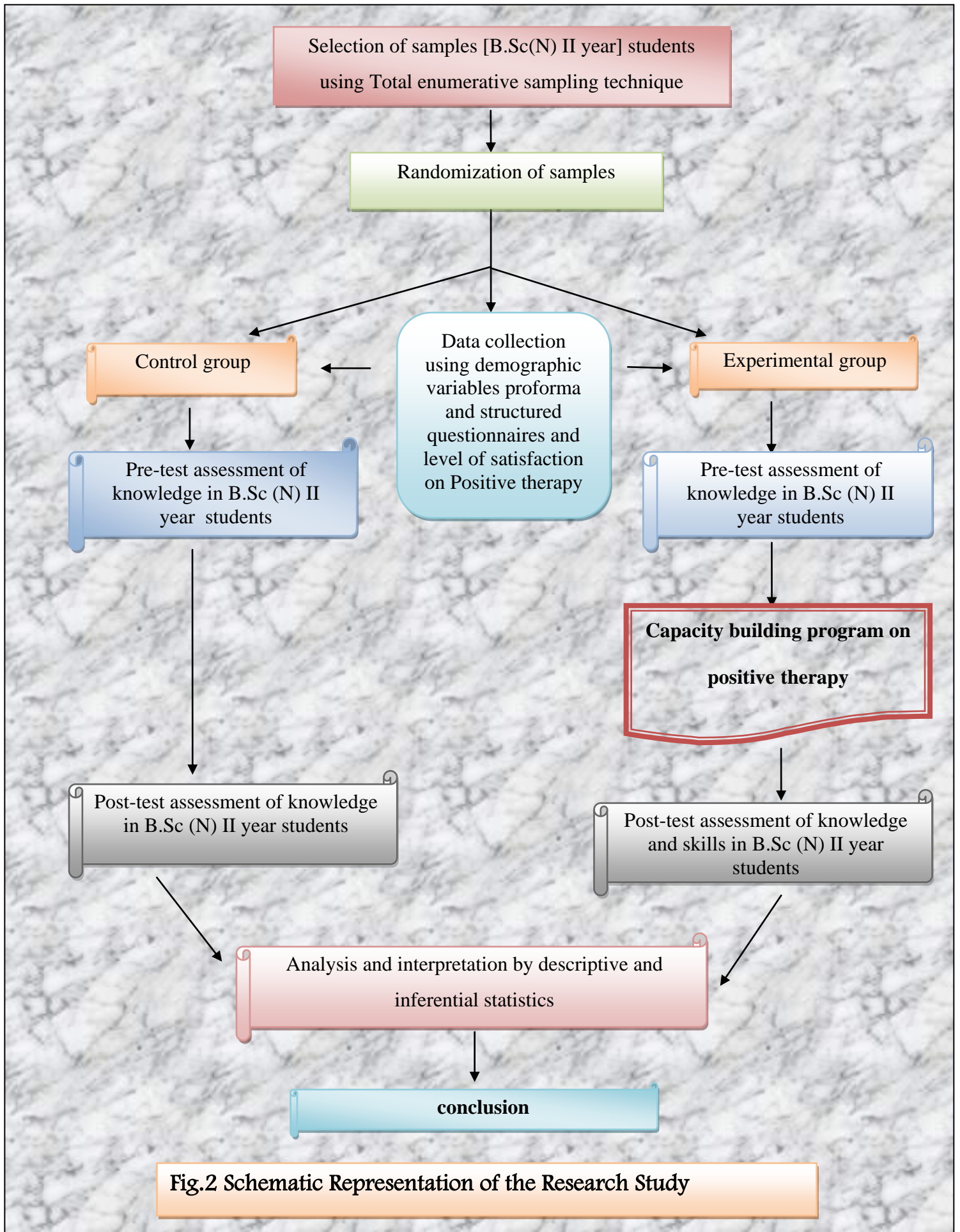
#### **Independent variables**

The variables that are believed to cause or influence the dependent variable is called independent variable (Polit & Beck, 2012). In this study, capacity building program on positive therapy for management of stress in infertile women were independent variable.

**Attribute Variables**

Variables that describe the study sample characteristics are termed as attribute variables (Polit & Beck, 2012).

Demographic variable such as age, religion, previous knowledge on positive therapy were the attribute variables in this study.



**Fig.2 Schematic Representation of the Research Study**

## **Research Setting**

According to Polit (2013), setting is the physical location and condition in which data collection is done in a study.

This study was conducted in Apollo College of Nursing, which is located at Ayanambakkam in Chennai, which is 20km away from Central Railway station. Apollo College of Nursing is a unit of Apollo Hospitals Educational Trust, comprising a fine faculty team, a well equipped library, laboratories, other clinical facilities and hostel facilities which contribute to overall personality development of the students. College offers various programs such as B.Sc (N), Post B.Sc (N), M.Sc (N), Post Basic Diploma and Ph.D in Nursing. 100 students are admitted for B.Sc (N) courses every year.

The setting has been chosen based on feasibility in terms of availability and accessibility of adequate samples.

## **Population**

Polit (2008) stated that the population is the entire aggregation of cases which meet the designed set criteria. In this study, the target population comprises of B.Sc (N) students.

### **Target population**

Target population is the group of population that the researcher has taken up for study and to generalization. In this study, target population comprises all the nursing students satisfying the inclusion criteria.

### **Accessible population**

The accessible population is the list of population that the researcher finds in the study area. The accessible population in this study consisted of the nursing students who satisfied the inclusion criteria in Apollo College of Nursing, Chennai.

### **Sample**

Polit (2013) states that the sample consists of the subset of the units that comprises the population. A sample consists of B.Sc (N) II year students who met the inclusion criteria in selected college at Chennai.

### **Sampling technique**

Total enumerative sampling technique was used for selections of the samples. There are 98 students in this batch. Students were randomly assigned to the control and the experimental group (According to merit list were assigned to control group and experimental group).

### **Sampling criteria**

#### **Inclusion criteria**

- Students Studying B.Sc (N) II year at Apollo College of Nursing.
- Available at the time of data collection.

#### **Exclusion criteria**

- Those who were not willing to participate in the study.

## **Selection & development of study instruments**

The data collection instruments were selected through an extensive review of literature and in consultation with experts and considering the views of faculty members. The following instruments were used in this study.

- Demographic Variables Performa
- Structured questionnaires for assessing knowledge
- Rating Scale on level of satisfaction of capacity building program
- Check list for assessing the skill on positive therapy

### **Demographic variable proforma of nursing students**

The Demographic variable perform consists of age, religion, native, previous knowledge about infertility, prior knowledge about positive therapy.

### **Knowledge assessment questionnaires**

Knowledge questionnaire to assess knowledge developed by Latha Venkatesan (2015) was used in this study. It consists of 40 MCQ items. Scored was assigned for each right answer 1. Thus total obtainable score is 0 – 4. Obtained score is converted into percentage and interpreted as follows

<b>Percentage</b>	<b>Levels of knowledge</b>
75 -100	Adequate knowledge
50 -74	Moderately adequate knowledge
Below 50	In adequate knowledge



### **Level of satisfaction**

It has been developed by the investigator for assessing the satisfaction of positive therapy for management of stress in infertile women. This scale consisted of 10 items on satisfaction of the study participants regarding the various aspects of positive therapy rated on four point scale with score Highly satisfied - 4, Satisfied -3, Dissatisfied -2, Highly dissatisfied -1. Thus the total obtainable score was 10-40. The obtained score is converted into percentage and is interpreted as follows,

### **Level of satisfaction**

<b>Score</b>	<b>Percentage</b>	<b>level of satisfaction</b>
31 - 40	< 76 – 100 %	highly satisfied
21 – 30	50 – 75	Satisfied
11 – 20	25 – 49	Dissatisfied
1 – 10	1 – 24	highly dissatisfied

### **Check list to assess skill**

Check list has been designed by the investigator for assessing the skills of students in positive therapy. It consists of 8 items. With options such as done and not done. and scores as 1 and zero respectively. Thus total obtainable score is 0 – 8. Obtained score is converted into percentage and interpreted as follows.

<b>Percentage</b>	<b>Levels of skills</b>
80-100	Excellent
60 – 79	Very good
40 – 59	Good
20 – 39	Average
< 20	Poor

### **Protection of Human Rights**

- The study was conducted after getting approval from the Ethical Committee, Apollo Hospitals, Chennai.
- Permission was obtained from the Principal, Apollo College of Nursing.
- The participants were given explanation of the study and written consent was obtained from them.
- Confidentiality of the data was maintained throughout the study.

### **Psychometric Properties of Study instruments**

#### **Validity**

Content validity is the degree to which the instrument measures what it is supposed to measure. Content validity is the sampling adequacy of the content being measured (Polit 2011).

Content validity was obtained by getting opinion from experts. The experts have suggested some specific modification in demographic variables proforma of the nursing students and the rating scales on the level of satisfaction of capacity building program on positive therapy in nursing students. The modification and suggestion of experts were incorporated in final preparation of tool.

#### **Reliability**

It is the degree of consistency which an instrument measures the attribute which is designed for measurements (Polit 2013).

Structured Questionnaires	– 0.9 (split – half method)
Observational checklist	- 0.9 (split – half method)
Rating scale	- 0.9 (split – half method)

### **Pilot Study**

Pilot and Beck (2013) state that a pilot study is a miniature of some parts of the actual study in which the instruments are administered to the subjects drawn for the same population.

It is a small scale version or trial run done in the preparation for the major study. The purpose is to find out the feasibility and practicability of the study design. The Pilot study was conducted among B.Sc (N) II year students at Billroth College of Nursing, Chennai. The subjects were chosen by simple random sampling, 10 in the control and 10 in the experimental group. Capacity building program on positive therapy was administered for the experimental group for 2 days, while there was no intervention for control group. Level of knowledge was assessed by structured questionnaires for both the control and the experimental group. Then the level of satisfaction was assessed by using a rating scale, while skills were assessed for experimental group using check list on positive therapy.

### **Intervention Protocol**

A capacity buildings programme of nursing students in positive therapy for management of stress of infertile women. This will help the students to gain knowledge

in positive therapy In this study it refers to the planned educational intervention which includes

- Deep breathing practices
- Relaxation therapy
- Stopping stress symptoms
- Negative thought stopping
- Instilling positive thought
- Tension relieving exercise
- Smile therapy
- Laugh therapy

This programme was administered for two hours which included one hour teaching followed by one hour demonstration on positive therapy for the experimental group of B.sc (N) II year students by the investigator at the auditorium of Apollo college of nursing.

### **Data Collection Procedure**

Data collection is gathering of information about something which the researcher has chosen to explore or investigate (polit, 2013).The researcher was trained for a week about positive therapy. Permission was obtained from the Principal and the class coordinator of the II year B.Sc (N) of Apollo College of Nursing.

Study participants were assembled in a class room. An assurance was taken from the participants regarding the maintenance of confidentiality before the data collection procedure and consent was obtained by the researcher from the subjects for participating in the study.

Structured questionnaires were administered to the participants and their level of knowledge was assessed in both the control and the experimental groups before capacity building program intervention was taken up. The capacity building program was administered later to the experimental group by using lecture cum demonstration method for two hours.

Knowledge level was assessed after one week of intervention using the same structured questionnaires in both the control and the experimental groups. Level of satisfaction regarding positive therapy was also assessed using the satisfaction rating scale on capacity building program, skills were assessed using check list on positive therapy for experimental group.

### **Plan for data analysis**

Data analysis is the systematic organization, synthesis of research data and testing of null hypothesis by using the obtained data (Polit, 2013). Analysis and interpretation of data were carried out by using descriptive and inferential statistics.

Descriptive statistics such as mean, frequency, and percentage was used for describing demographic variables and inferential statistics such a 't'test was used to assess the effectiveness of capacity building program on the level of knowledge comparing the pre test and post test mean score of stress. Correlation test was used for finding out the correlation between knowledge and skills among pre-test and post-test of control and experimental group of nursing students.

## **Summary**

This chapter dealt with the selection of the research approach, the research design, the setting, the population, the sample and the sampling technique, the selection and development of study instruments, validity and reliability of the study instruments, pilot study, data collection procedure, and plan for data analysis.

## **CHAPTER- IV**

### **ANALYSIS AND INTERPRETATION**

Data analysis is conducted to reduce, organize and give meaning to the data. The results obtained from data analysis require interpretation to be meaningful. Interpretation of data involves examination of the results from analysis and data forming conclusions, considering the implications for nursing, exploring the significance of the findings and suggesting further studies (Burns & Groove, 2007).

This chapter deals with analysis and interpretation of data collected on a number of issues from various sources. Statistics is a field of study concerned with techniques or methods of data collection, classification, summarizing, interpretation, drawing inferences, testing of hypothesis and making recommendations (Mahajan, 2004). Data was collected from 98 students who are studying at Apollo College of Nursing, Chennai, Among them 49 were in the control group and 49 in the experimental group for determining the effectiveness of capacity building program of nursing students in positive therapy for management of stress in infertile women. The data were analyzed according to the objectives and hypothesis of the study. Analysis of the data was compiled after all the data was transferred to the master coding sheet. The data were analyzed, tabulated and interpreted using appropriate descriptive and inferential statistics.

#### **Organization of the Findings**

1. To assess the level of knowledge and skills among the control and the experimental groups of nursing students in positive therapy for management of stress in infertile women.

2. To assess the effectiveness of the capacity building program on positive therapy for management of stress in infertile women by comparing pre-test knowledge, Skills and post-test knowledge, Skills of Nursing students.
3. To assess the level of satisfaction of the capacity building program on positive therapy for managing stress in infertile women in experimental group of Nursing students.
4. To find out the correlation between knowledge and skills in nursing students on positive therapy for managing stress in infertile women in pre-test and post- test of control and experimental group of Nursing students.

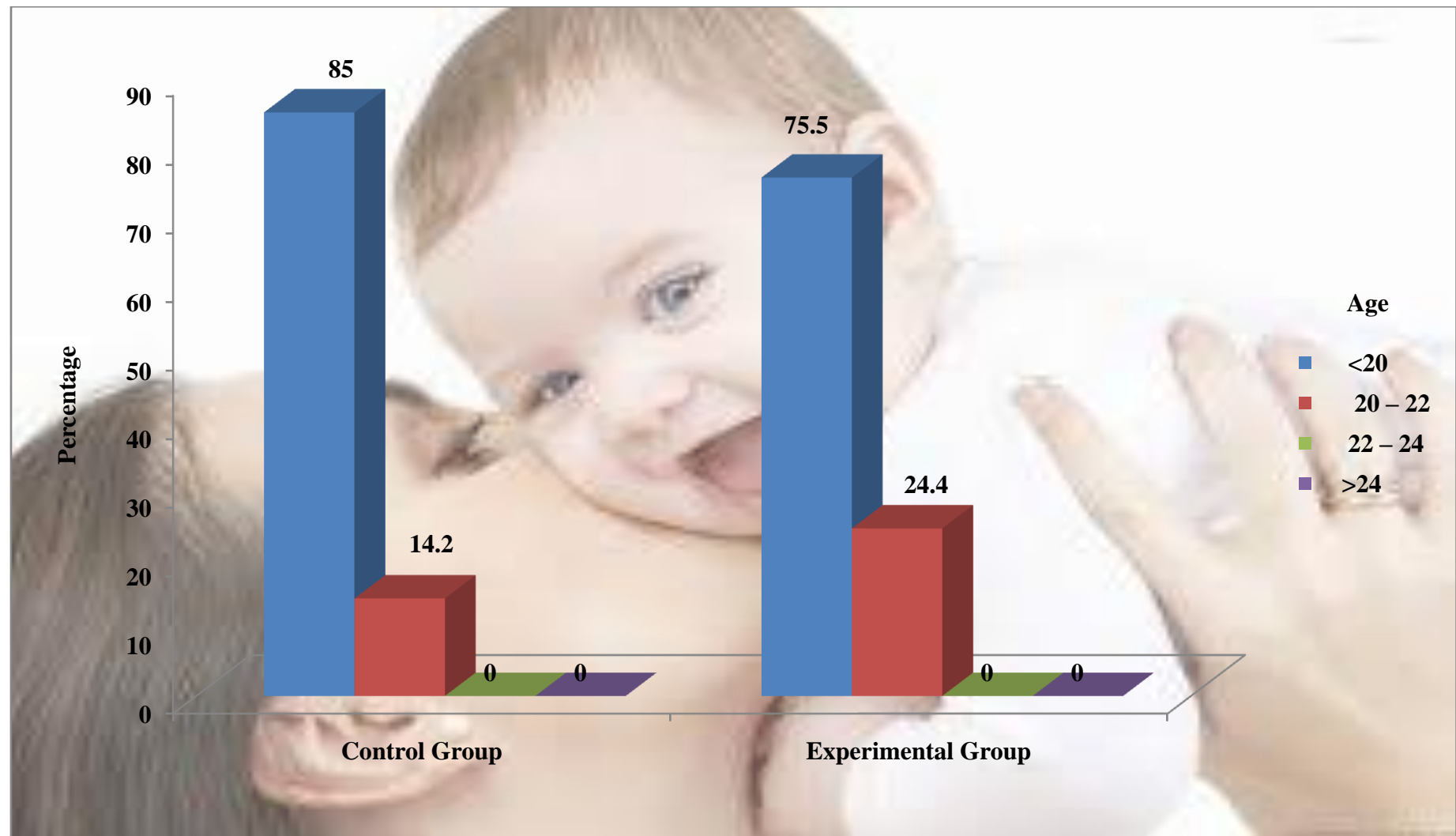


**Table. 1**

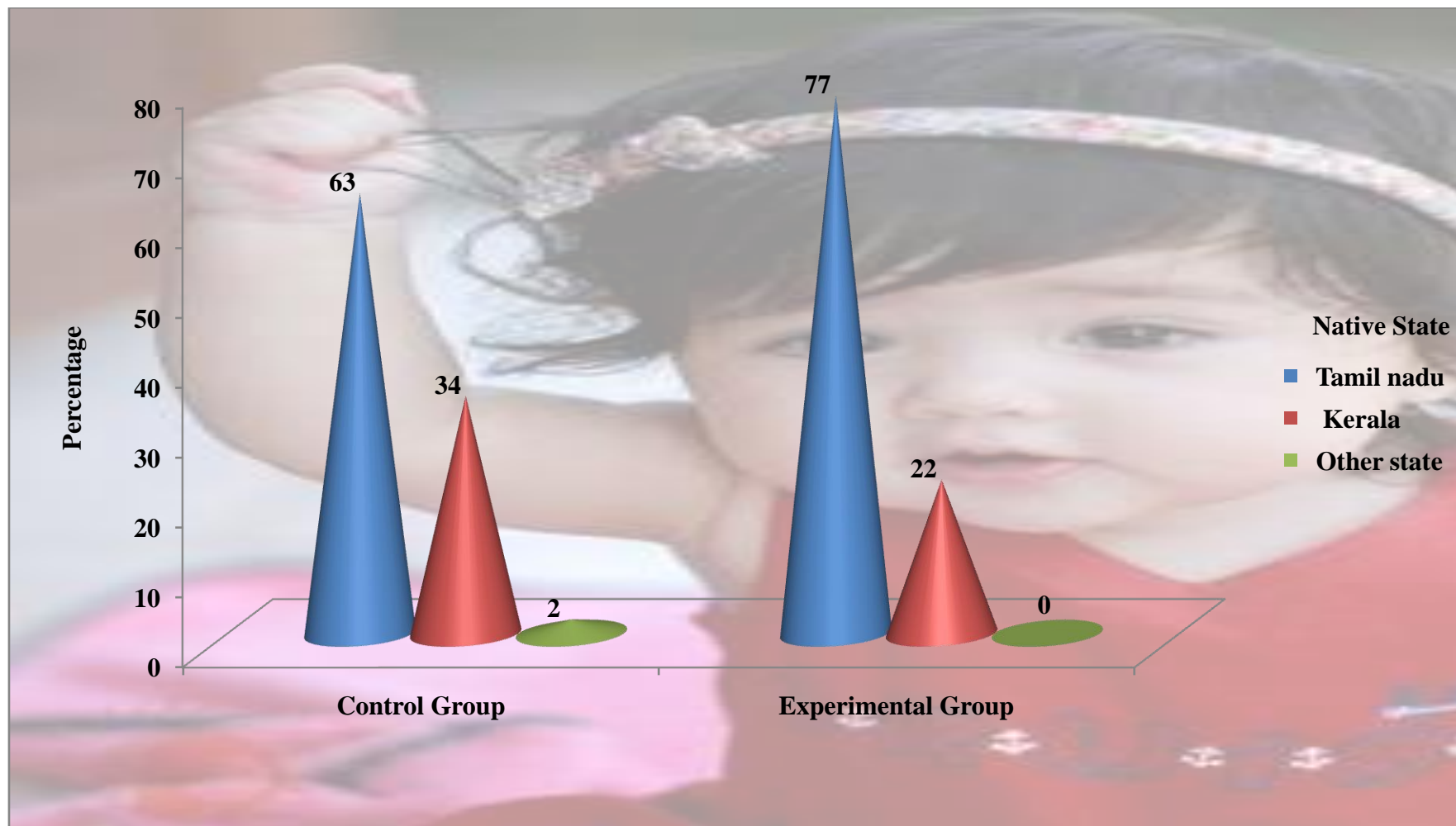
**Frequency and Percentage Distribution of Demographic Variables in Control and Experimental Group of B.sc (N) II year Students.**

<b>Demographic Variables</b>	<b>Control Group (n=49)</b>		<b>Experimental Group (n=49)</b>	
	<b>f</b>	<b>%</b>	<b>f</b>	<b>%</b>
<b>Experience in caring infertile women</b>				
Yes	-	-	-	-
No	49	100	49	100
<b>Religion</b>				
Hindu	26	53	31	63
Christian	22	44	17	34
Muslim	1	2	-	-
<b>Previous knowledge about Infertility</b>				
Yes	34	69	30	61
No	15	30	19	38
<b>Prior knowledge about Positive therapy</b>				
Yes	18	45	9	18
No	31	63	40	81

The data in the table 1 reveals that Majority of the nursing students were aged less than 20 years (85 %, 75.5 %), More than half of the students were Hindus ( 53% 63%), Most of the students are from Tamilnadu (63% 77 %), Majority of the students were not having a previous knowledge about positive therapy (69% 61%) and prior knowledge about infertility (45% 18%) in control and experimental group respectively.



**Fig.3. Percentage distribution of age group in the control and experimental group of B.sc nursing II year**



**Fig. 4 Percentage distribution of Native state in the control and experimental group of B.sc nursing II year**

**Table. 2**

**Frequency and Percentage Distribution of Level of Knowledge of B.sc (N) II year students in Control Group**

<b>Level of knowledge</b>	<b>Pre – test (n=49)</b>		<b>Post test (n=49)</b>	
	<b>f</b>	<b>%</b>	<b>f</b>	<b>%</b>
<b>Adequate knowledge (75 – 100%)</b>	-	-	-	-
<b>Moderately adequate (50 -74%)</b>	16	32.6	13	26.3
<b>Inadequate knowledge (Below 58%)</b>	33	67.3	36	90

The data presented in the table 2 depicts that Majority of them had inadequate knowledge (67.3, 90%) in pre and post test respectively.

**Table. 3**

**Frequency and percentage distribution of level of knowledge of B.sc (N) II year in Experimental group.**

<b>Level of knowledge</b>	<b>Pre – test (n=49)</b>		<b>Post – test (n=49)</b>	
	<b>f</b>	<b>%</b>	<b>f</b>	<b>%</b>
<b>Adequate knowledge (75 – 100%)</b>	-	-	42	85.7
<b>Moderately adequate (50 – 74 %)</b>	15	30.5	7	14
<b>Inadequate (Below 50 %)</b>	34	68.5	-	-

The data presented in the table 3 indicates inadequate knowledge in a majority of the students (69.3%) in pre-test whereas in post-test, Majority of them had Adequate knowledge (85.7%).

**Table.4**

**Comparison of Mean and Standard Deviation of knowledge of Nursing Students in Positive therapy for Management of Stress in Infertile Women Among Control and Experimental Group of B.Sc (N) II year Students.**

Group	Pre-test		Post- test		paired- t value
	Mean	SD	Mean	SD	
Control group (n=49)	17.57	3.04	17.06	3.09	0.85
Experimental group (n=49)	17.97	2.81	31.9	3.19	29.37***

\*\*\*  $p < 0.001$

The data presented in the table 4 shows that the difference in mean and standard deviation of knowledge scores of nursing students between pre-test and post-test is (M=17.57 ,17.06 SD= 3.04 3.09) as not statistically significant ( $p>0.05$ ) in the control group. But in the experimental group the difference in mean and standard deviation (M=17.97 31.9 SD= 2.81 3.19) was statistically significant ( $p<0.05$ ) between pre-test and post-test .i.e. Knowledge score was high in experimental group when compared to the control group. It can be attributed to the effectiveness of the capacity building program in positive therapy for management of stress in infertile women upon knowledge and skill of students Hence the null hypothesis  $H_{01}$  “there will be no significant difference in the level of knowledge skills in control and experimental group of B.Sc(N)II year students before and after administration of positive therapy” was rejected.

**Table 5:**

**Comparison of Mean Knowledge Scores Between Control and Experimental Group of B.sc (N) II year Before and After Capacity Building Program on Positive therapy**

Group	Pre-test			Post-test		
	Mean	SD	Independent t-value	Mean	SD	Independent t-value
Control (n= 49)	17.59	3.04	0.65	17.06	3.09	23.9***
Experimental (n=49)	17.97	2.81		31.9	3.19	

\*\*\*  $p < 0.0001$

The data presented in the table 5 depicts the difference in mean and standard deviation of knowledge scores of nursing students between pre-test and post-test is (M=17.579,17.06 SD= 3.04 3.09) was not statistically significant ( $p>0.05$ ). Whereas in post test the difference in mean and standard deviation (M=17.97 2.81, SD=31.9 3.19) between control and experimental group of nursing students was statistically significant ( $p<0.05$ ).i.e. Mean Post test knowledge score was less in the control group than in the experimental group. This can be attributed to the effectiveness of the capacity building program in positive therapy for management of stress in infertile women. Hence the null hypothesis  $H_{02}$  “there will be no significant difference in the level of knowledge skills in control and experimental group of II year B.Sc (N) students before and after administration of positive therapy” was rejected.



**Table :6**

**Frequency and Percentage Distribution of Level of Skills Regarding Positive therapy for Management of Stress in Infertile Women Among Experimental group of B.sc (N) II year students.**

**(n =49)**

Levels of skills	Excellent		Very good		Good		Average		Poor	
	f	%	f	%	f	%	f	%	f	%
Relaxation therapy	49	100	-	-	-	-	-	-	-	-
Counselling	--	-	-	-	47	95.9	2	4.0	-	-
Exercise	49	100	-	-	-	-	-	-	-	-

The data from table 8 shows a majority of the students were excellent related to relaxation therapy (100%) and exercises (100%) and good in counselling (95.9%) and two students were average ability in counselling (4.0%) in experimental group.

**Table: 7**

**Correlation Between Post test Knowledge and Skills of B.sc (N) II year Students in Experimental Group on Positive therapy to Manage Stress in Infertile Women.**

**(n =49)**

<b>Variables</b>	<b>Mean score</b>	<b>r</b>
Knowledge	<b>32.1</b>	<b>0.74</b>
Skills	<b>7.7</b>	

Table 7 despites A positive correlation between knowledge and skills (  $p < 0.01$ ).

**Table :8**

**Frequency and Percentage Distribution on the Level of Satisfaction on Capacity Building Program of B.sc (N) II year Students in Positive therapy For Management of Stress in Infertile Women.**

**(n=49)**

Level of satisfaction	Highly satisfied		Satisfied		Dissatisfied		Highly dissatisfied	
	f	%	f	%	f	%	f	%
Researcher	29	59	20	41	-	-	-	-
Positive behavior Therapy	32	65	17	35	-	-	-	-
Effectiveness of positive therapy	17	35	32	65	-	-	-	-

The data from table 6 depicts a majority of the students were highly satisfied (65%) and some of the students were satisfied (35%) related to the positive behaviour therapy. A majority of the students were highly satisfied (65%) with the effectiveness of positive therapy. 59 % of the students were highly satisfied by the researcher's approach towards teaching positive therapy in experimental group.

## **Summary**

This chapter deals with analysis and interpretation of data obtained by the researcher. The analysis of the results showed increases in level of knowledge after the capacity building program on positive therapy, this implied that the capacity building program in positive therapy for management of stress in infertile women is effective among experimental group of nursing students.

## **CHAPTER V**

### **DISCUSSION**

The study was carried out using true experimental research design upon 98 B.Sc nursing II year students at Apollo College of nursing, Chennai. The level of knowledge was assessed using the structured questionnaires in the control and the Experimental groups of nursing students. The process of Capacity building program on positive therapy was administered in the evening for the period of 1 week to the experimental group of nursing students. After 1 week the level of knowledge was assessed by using structured questionnaires in the control and the experimental group of nursing students. Then the level of satisfaction on positive therapy was assessed by using a rating scale for the experimental group of nursing students.

#### **Objectives of the Study**

1. To assess the level of knowledge and skills among the control and the experimental group of nursing students in positive therapy for management of stress in infertile women.
2. To assess the effectiveness of the capacity building program on positive therapy for management of stress in infertile women by comparing pre-test knowledge, Skills and post-test knowledge, Skills of nursing students.
3. To assess the level of satisfaction of the capacity building program on positive therapy for managing stress in infertile women in the experimental group of nursing students.

4. To find out the correlation between knowledge and skills in nursing students on positive therapy for managing stress in infertile women in pre- test and post- test of control and experimental group of nursing students.

The discussion is presented under the following headings

- Demographic variables in the control and the experimental group of B.Sc (N) II year students.
- Level of knowledge in the control and the experimental group of B.Sc (N) II year students.
- Effectiveness of capacity building programme on positive therapy for management of stress in infertile women among B.Sc (N) II year students.
- Determination of the level of skills regarding the positive therapy among experimental group II year B.sc (N) students.
- Correlation between knowledge and skills of nursing students on positive therapy for management of stress in infertile women among B.sc (N) II year students
- Level of satisfaction regarding positive therapy among the experimental group of year B.Sc (N) II year students.

**Demographic variables in control and experimental group of B.Sc (N) II year students.**

A majority of the nursing students were less than 20 years of age (85 %, 75.5 %), More than half of the students were Hindus ( 53% 63%), Most of the students were from Tamilnadu (63% 77 %), A majority of the students did not have any previous

knowledge about positive therapy (69% 61%) and prior knowledge about infertility (45% 18%) in the control and the experimental group respectively.

**The first objective of the study was to assess the level of knowledge and skills among the control and the experimental group of nursing students before and after administration of capacity building program in positive therapy.**

Nurses play a vital role in the promotion of health, prevention and treatment of illness. Hence this study was conducted among the student nurses for determining the knowledge and skills in nursing students in positive therapy for management of stress in infertile women. Study findings revealed a majority of them having inadequate knowledge (67.3, 90 %) in pre and post test respectively. In experimental group a majority of the students had inadequate knowledge (69.3%) in pre-test whereas in post-test, majority of them has Adequate knowledge (85.7%) .

**The Second Objective was to assess the effectiveness of the capacity building program on positive therapy for management of stress in infertile women by comparing pre test knowledge, Skills and post test knowledge, Skills of nursing students.**

The control group of nursing students had no adequate knowledge (67.3% 90%) in both before and after administration of the capacity building program on positive therapy. A majority of the nursing students in the experimental group (69.3%) were found to have no adequate knowledge before administration of the capacity building program on positive therapy.

However, after administration of the capacity building program on positive therapy, Most of the students (85.7%) having adequate knowledge and a few students (7 14%) were found to have a moderately adequate knowledge in positive therapy. The difference in mean and standard deviation of knowledge scores of nursing students between pre-test and post-test ( $M=17.57$  , $17.06$   $SD= 3.04$   $3.09$ ) was not statistically significant ( $p>0.05$ ) in the control group. But in the experimental group the difference in mean and standard deviation ( $M=17.97$   $31.9$   $SD= 2.81$   $3.19$ ) was statistically significant ( $p<0.05$ ) between pre-test and post-test i.e. Knowledge score was high in the experimental group when compared to the control group and in the level of skills on positive therapy, a majority of the students were excellent on the subject of relaxation therapy (100%), exercises (100%) , good in counselling (95.9%) in experimental group. It can be attributed to the effectiveness of the capacity building program on positive therapy for management of stress in infertile women upon the knowledge and skill of nursing students.

Hence the null hypothesis  $H_{01}$  “there will be no significant difference in the level of knowledge skills in control and experimental group of II year B.Sc (N) students before and after administration of positive therapy” was rejected.

Jayasudha (2011) has conducted a study on the impact of positive therapy upon stress levels in infertile women and found a majority of the women experiencing moderate to high level of stress and decreased levels of general wellbeing in the pre test. But after undergoing positive therapy, the experimental group of women were found to have an low stress and increased level of general well being in the post test. The control



group infertile women did not have any significant reduction in the stress or improvement in their general well being.

**Third Objective of the study was to assess the level of satisfaction on the capacity building program on positive therapy for managing stress in infertile women in experimental group of nursing students**

While making a plan for any intervention, it is important to consider the participants' satisfaction, to ensure their cooperation and to continue the intervention even after completion of the study. Satisfaction arises from a person when therapy is balanced between the study participants' choice and professional responsibility and high level of satisfaction can be obtained by the participants. A majority of the students were highly satisfied (65%) and some of the students were satisfied (35%) related to the positive behaviour therapy. Majority of the students were highly satisfied (65%) in effectiveness of positive therapy. 59 % of the students were highly satisfied by the researcher's approach towards teaching positive therapy in experimental group.

**The fourth objective of the study was to find out the correlation between knowledge and skills in nursing students on positive therapy for managing stress in infertile women with selected variables in pre test and post test of control and experimental group of nursing students.**

Karl Pearson test was used for finding out the correlation between the knowledge and skills. The study findings reveal a highly positive correlation (0.74) between knowledge and skills in the first observation of positive therapy among nursing

students in the experimental group. Ho<sub>2</sub>: There is no significant correlation between knowledge and skills of nursing students with selected demographic variables in pre-test and post-test of experimental and control group was rejected.

### **Summary**

This chapter deals with the objective of the study, major findings of the demographic variables of nursing students, level knowledge and skills before and after administration of capacity building program on positive therapy for management of stress in infertile women, mean and standard Deviation of knowledge level before and after the capacity building program on positive therapy, correlation between knowledge and skills of nursing students level of satisfaction of capacity building program on positive therapy.

## **CHAPTER-VI**

### **SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS**

#### **Summary**

The objective of the study is to assess the Effectiveness of Capacity building program on Positive therapy for Management of Stress in Infertile Women upon the Knowledge and Skills of Nursing students at Apollo college in Chennai.

#### **Objectives of the Study**

1. To assess the level of knowledge and skills among the control and the experimental group of nursing students in positive therapy for management of stress in infertile women.
2. To assess the effectiveness of the capacity building program on positive therapy for management of stress in infertile women by comparing pre-test knowledge, Skills and post-test knowledge, skills of nursing students.
3. To assess the level of satisfaction of the capacity building program on positive therapy for managing stress in infertile women in experimental group of nursing students.
4. To find out the correlation between knowledge and skills in nursing students on positive therapy for managing stress in infertile women in pre- test and post- test of control and experimental group of nursing students.

### **Null Hypotheses**

The null hypotheses stated are:

- Ho<sub>1</sub>: There will be no significant difference between pre and post intervention, knowledge and skills on positive therapy among nursing students.
- Ho<sub>2</sub>: There will be no significant correlation between knowledge and skills of nursing students with selected demographic variables in pre test and post test of experimental and control group.

True experimental research design was used for this study. It was conducted at Apollo College of Nursing. 98 nursing students were selected through Total enumerative sampling technique. Out of these 98 nursing students 49 were assigned to the control group and 49 to the experimental group. The capacity building program on positive therapy was administered for the experimental group. Pre-test was conducted in the control and the experimental groups using predetermined tools such as demographic variable proforma, structures questionnaires. Post test was conducted using same tool. Level of satisfaction was assessed for experimental group alone. Data collection was done for the main study after the pilot study. The collected data was analyzed using descriptive and inferential statistics.

### **Major findings of the study**

#### **Demographic variables in control and experimental group of B.Sc (N) II year Students.**

A majority of the nursing students were aged less than 20 years (85 %, 75.5 %), More than half of the students were Hindus ( 53% 63%), Most of the students are from Tamil nadu (63% 77 %), A majority of the students did not have any previous knowledge

about positive therapy (69% 61%) and prior knowledge of infertility (45% 18%) in the control and the experimental group respectively.

**Level of knowledge in control and experimental group of B.Sc (N) II year students.**

Nurses play a vital role in the promotion of health, prevention and treatment of illness. So this study was conducted among the students nurses for determining the knowledge and skills of nursing students in positive therapy for management of stress in infertile women. Study findings revealed a majority of them having no adequate knowledge (67.3, 90) in pre and post test respectively. In the experimental group a majority of the students had no adequate knowledge (69.3%) in pre-test whereas in post-test a majority of them had adequate knowledge (85.7%).

The difference in mean and standard deviation of knowledge scores of nursing students between pre test and post test is ( $M=17.57$ ,  $17.06$   $SD= 3.04$   $3.09$ ) was not statistically significant ( $p>0.05$ ) in the control group. But in the experimental group, the difference in mean and standard deviation ( $M=17.97$   $31.9$   $SD= 2.81$   $3.19$ ) is statistically significant ( $p<0.05$ ) between pre-test and post-test .i.e. Knowledge score is high in the experimental group when compared to the control group and in the level of skills on positive therapy a majority of the students were excellent on the subject of relaxation therapy (100%) and exercise (100%) and good in the counselling (95.9%) in the experimental group. This can be attributed to the effectiveness of the capacity building program in positive therapy for management of stress of infertile women upon knowledge and skill of nursing students.

Hence the null hypothesis  $H_{01}$  “there will be no significant difference in the level of knowledge skills in control and experimental group of II year B.Sc (N) students before and after administration of positive therapy” was rejected.

**Correlation between knowledge and skills of nursing students on positive therapy to manage stress in infertile women with selected variables in pre test and post test of control and experimental group of B.sc (N) II year students**

Karl Pearson test was used for finding out the correlation between the knowledge and skills. The study findings reveal a highly positive correlation (0.74) between knowledge and skills in the first observation of positive therapy among nursing students in the experimental group.  $H_{02}$ : There is no significant correlation between knowledge and skills of nursing students with selected demographic variables in pre test and post test of the experimental and the control group was retained.

**Level of satisfaction on capacity building program on positive therapy**

A majority of the students were highly satisfied (65%) and some of the students were satisfied (35%) about the positive behaviour therapy. A majority of the students were highly satisfied (65%) in effectiveness of positive therapy. 59 % of the students were highly satisfied by the researcher’s approach towards teaching positive therapy in experimental group.

## **Conclusion**

Positive therapy is one of the psychological interventions which facilitate sound mental health, leading to better adjustment. Positive therapy helps in the development of positive personality traits such as courage, confidence, and cheerfulness. optimism etc. and trains infertile women to face their problems with a smile. When the nursing students are empowered to practice and teach positive therapy, in turns they will help the women to learn and practice this therapy, This may bring positive results in terms of reducing stress by which, even there is more possibility of becoming pregnant which is the ultimate aim of infertile women.

## **Implications**

Based on the findings of the study the researcher recommends the implications on nursing practice, nursing education, nursing administration, nursing research.

### **Nursing practice**

The students of the experimental group experienced an increase in the level of knowledge and skills in positive therapy compared to the control group proving its effectiveness for use. Many infertile women end up in different complications due to stress. Infertility may leads to stress. Hence it essential for the nurses to have adequate knowledge and take initiative to educate the infertile women about the positive therapy which will reduce the stress levels. Hence the nurses must be empowered with positive therapy which is beneficial for the infertile women to reduce their stress by which possibility of becoming pregnant can be increased.

### **Nursing education**

The curriculum should also emphasize the psychosocial aspects of infertility including the management of stress, which in turns help the women to cope with the problems.

### **Nursing Administration**

The nurse administrators have an important responsibility in organizing continuing nursing education program and short term courses for preparing the staff nurses get specialized in caring for infertile women. Strategies like positive therapy, absolutely calm environment, free from noises and any other type disturbances is needed for implementing stress reduction and avoiding interruption in between the therapy process. Nurses administrators can ensures these facilities are made available in the infertility unit and the administrators can allow the students nurses for teaching to the infertile patient about positive therapy.

### **Nursing Research**

Many more numbers of studies must be conducted in the area of infertility and stress reduction strategies , which can enhance the pregnancy rates in infertility women Despite the presence of advanced techniques in managing and helping women to become pregnant for, managing then Psychological problems, conducting extensive research in this area will help in managing Psycho social problems , which will ultimately help in improving the pregnancy rates among infertile women which is ultimate goal in women life.



## **Recommendations**

The study can be conducted with larger samples to generalize the results.

- The study can be replicated in different settings.
- The impact of positive therapy upon among nursing students to reduce the stress level can be studied.
- Effectiveness of positive therapy to reduces the stress level among infertile women can be studied.
- The same study can be conducted among different levels of students e.g. Post basic B.Sc, M.Sc I year nursing students, Post Diploma students etc.

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## APPENDIX - I

### LETTER SEEKING PERMISSION TO CONDUCT THE STUDY



(A unit of Apollo Hospitals Educational Trust)

(Recognised by the Indian Nursing Council and Affiliated to the Tamil Nadu Dr. M.G.R. Medical University, Chennai)

CO/0205/15

05.05.2015

To

The Principal  
Apollo College of Nursing  
Chennai – 600 095.

Respected Madam,

**Sub.:** To request permission for research study – Reg.

**Greetings!** As part of the curriculum requirement our 2nd year M. Sc. (N) student Ms. Poonthalir.V has selected the following title for her research study.

**“An experimental study to assess the effectiveness of capacity building program of nursing students in positive therapy for management of stress of infertile women upon knowledge and skills of students at selected nursing college in chennai”**

So I kindly request your goodselves to permit her to conduct study in your esteemed institution.

Thanking You,

  
**Dr. LATHA VENKATESAN**  
**PRINCIPAL**

Regd. Office : 21, Greaves Lane Off, Greaves Road, Chennai - 600 006. Ph. : +91-44-2829 3333, 2829 0200 Website : [www.apollohospitalseducation.com](http://www.apollohospitalseducation.com)  
Unit Office : Vanagaram to Ambattur Main Road, Ayanambakkam, Chennai - 600 095. Phone : 044 - 2653 4387 Fax : 044 - 2653 4923 / 2653 4386



Emergency Service  
Dial **1066**



CO/0210/15

08.05.2015

To

The Principal  
Billroth College of Nursing  
No.2, Mettukuppam Road  
Maduravoyal  
Chennai – 602 095.

Respected Madam,


**Sub.:** To request permission for research study – Reg.

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So I kindly request your goodselves to permit her to conduct study in your esteemed institution.

Thanking You,

  
**Dr. LATHA VENKATESAN**  
**PRINCIPAL**

*Permitted.*  
*C. Chandrasekhar*  
*12.05.15.*

Regd. Office : 21, Greaves Lane Off, Greaves Road, Chennai - 600 006. Ph. : +91-44-2829 3333, 2829 0200 Website : [www.apollohospitalseducation.com](http://www.apollohospitalseducation.com)  
Unit Office : Vanagaram to Ambattur Main Road, Ayanambakkam, Chennai - 600 095. Phone : 044 - 2653 4387 Fax : 044 - 2653 4923 / 2653 4386

## APPENDIX - II

### ETHICAL COMMITTEE LETTER



#### Institutional Ethics Committee - Clinical Studies

Reg. No. : ECR/37/Inst/TN/2013

7 July 2015

To,  
Ms. Poonthalir V.,  
First year, M.SC (Nursing),  
Apollo College of Nursing, Chennai.

**Ref:** An experimental study to assess the effectiveness of capacity building program of nursing students in positive therapy for management of stress of infertile women upon knowledge and skill of students at selected nursing colleges in Chennai.

**Sub:** Approval of the above referenced project and its related documents.

Dear Ms.Poonthalir,

The Institutional Ethics Committee-Clinical Studies has received the following document submitted by you related to the conduct of the above-referenced study -

- Project Proposal
- Informed Consent Form

The Institutional Ethics Committee-Clinical Studies reviewed (through expedited review) and discussed the project proposal documents submitted by you at a specially convened meeting held on 7 July 2015.

The following members were present at the meeting held on 7 July 2015 at 2:00pm at Apollo Hospitals Educational Research Foundation, Conference Hall, Room No: 19, 2nd Floor, Krishnadeep Chambers, Wallace Garden, Chennai:

Name	Gender	Designation	Affiliation	Position in the committee
Dr. Rema Menon	F	Blood Bank Officer	Apollo Hospitals, Chennai	Member Secretary (Clinician)
Dr. Pradeep Kumar	M	Clinical Pharmacologist	Apollo Hospitals, Chennai	Member (Pharmacologist)
Dr. Rama Narasimhan	F	Senior Consultant- Internal Medicine	Apollo Hospitals, Chennai	SRSC Member (Clinician)
Dr. Sivagnanasundaram	M	Senior Consultant -	Madras High	SRSC - Member

Apollo Hospitals Enterprise Limited,

21, Grems Lane, Off Grems Road, Chennai - 600 006, India, T : +91 44 2829 5045 / 6641 Fax : 91-44-2829 4449  
Email : ecapollochennai@gmail.com



## Institutional Ethics Committee - Clinical Studies

Reg. No. : ECR/37/Inst/TN/2013

7 July 2015

To,  
Ms. Poonthalir V.,  
First year, M.SC (Nursing),  
Apollo College of Nursing, Chennai.

**Ref:** An experimental study to assess the effectiveness of capacity building program of nursing students in positive therapy for management of stress of infertile women upon knowledge and skill of students at selected nursing colleges in Chennai.

**Sub:** Approval of the above referenced project and its related documents.

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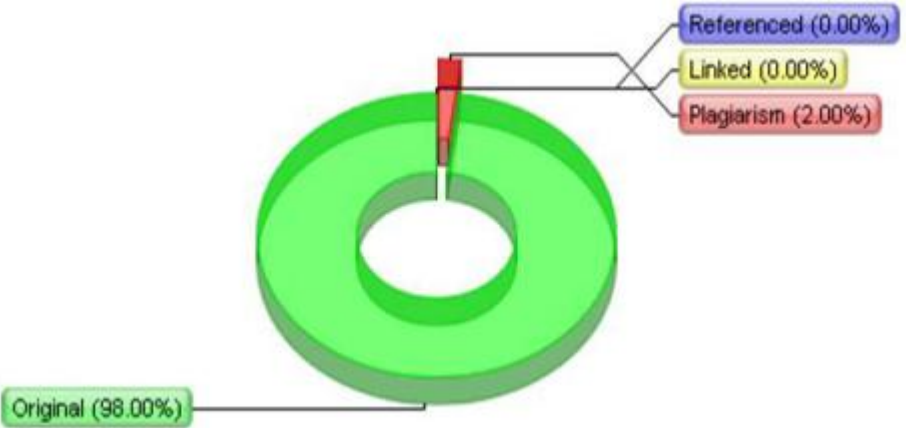
Name	Gender	Designation	Affiliation	Position in the committee
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Dr. Pradeep Kumar	M	Clinical Pharmacologist	Apollo Hospitals, Chennai	Member (Pharmacologist)
Dr. Rama Narasimhan	F	Senior Consultant- Internal Medicine	Apollo Hospitals, Chennai	SRSC Member (Clinician)
Dr. Sivagnanasundaram	M	Senior Consultant -	Madras High	SRSC - Member

Apollo Hospitals Enterprise Limited,

21, Grems Lane, Off Grems Road, Chennai - 600 006, India, T : +91 44 2829 5045 / 6641 Fax : 91-44-2829 4449  
Email : ecapollochennai@gmail.com.

## APPENDIX - III

### PLAGIARISM ORIGINALITY REPORT

	<b>Plagiarism Detector - Originality Report</b> Plagiarism Detector Project: <a href="http://plagiarism-detector.com">http://plagiarism-detector.com</a> Application core version:935										
Originality report details:											
<b>Generation Time and Date:</b>	04/06/2016 3:05:20 PM										
<b>Document Name:</b>	Poonthalir.V Thesis.doc										
<b>Document Location:</b>	C:\Documents and Settings\Administrator\Desktop\ Poonthalir.V Thesis.doc										
<b>Document Words Count:</b>	76440										
<b>Important Hint:</b> To understand what exactly is meant by any report value - you can click, “Help image”  It will navigate you to the most detailed explanation at our web site.											
<b>Plagiarism Detection Chart:</b>  <table border="1"> <caption>Plagiarism Detection Chart Data</caption> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Original</td> <td>98.00%</td> </tr> <tr> <td>Referenced</td> <td>0.00%</td> </tr> <tr> <td>Linked</td> <td>0.00%</td> </tr> <tr> <td>Plagiarism</td> <td>2.00%</td> </tr> </tbody> </table>		Category	Percentage	Original	98.00%	Referenced	0.00%	Linked	0.00%	Plagiarism	2.00%
Category	Percentage										
Original	98.00%										
Referenced	0.00%										
Linked	0.00%										
Plagiarism	2.00%										
<b>Referenced 0% / Linked 0%</b>											
<b>Original - 98% / 2% - Plagiarism</b>											



## APPENDIX - IV

### LETTER SEEKING PERMISSION TO USE THE STUDY TOOLS

#### LETTER SEEKING PERMISSION TO USE THE STUDY TOOL

Date: 02.06.15

To

The Principal,

Apollo College of Nursing,

Chennai -95.

*Permitted*  
*As the*

**Sub: Requesting permission to use the Research tool.**

Respected Madam,

PRINCIPAL  
APOLLO COLLEGE OF NURSING  
Vanagaram To Ambattur Main Road  
Ayanambakkam, Chennai-600 095.

This is for your kind consideration that, I am going to conduct a study on "Effectiveness of capacity building program of nursing students on Positive Therapy for management of stress in infertile women upon the knowledge and skills of B.sc (N) II year" in partial fulfillment of the requirements for the degree of M.sc (N).

In this regards I request you to kindly permit me to use the research tool developed by you on "Structured questionnaires" to collect data from the students.

Yours sincerely,

*V. Thangaraj*  
Poonthalir .V

## **APPENDIX - V**

### **LETTER REQUESTING OPINIONS AND SUGGESTIONS OF EXPERTS FOR ESTABLISHING CONTENT VALIDITY FOR THE STUDY**

From

Ms. Poonthalir .V,  
M. Sc., Nursing II year,  
Apollo College of Nursing,  
Chennai – 95.

To

Forwarded Through

Dr. Latha Venkatesan,  
Principal,  
Apollo College of Nursing.

Sub: Request for opinions and suggestions of experts for content validity of  
research tool

Respected Madam,

Greetings! As a part of the curriculum requirement the following research  
title is selected for the study.

**“Effectiveness of capacity building program on positive therapy for  
management of stress in infertile women upon the knowledge and skills of  
Nursing students”,** I will be privileged to have your valuable suggestions with  
regard to the establishment of Content Validity of the research tool. I kindly  
request you to validate my research tool and give suggestions about the same.

Thank you,

Sincerely,  
Poonthalir .V

## **APPENDIX - VI**

### **CONTENT VALIDITY CERTIFICATE**

I hereby certify that I have validated the research tool and interventional protocol of Ms. Poonthalir.V, M.Sc., Nursing II year student who is undertaking the research study on **“Effectiveness of capacity building program on positive therapy for management of stress in infertile women upon the knowledge and skills of Nursing students.”**

Signature of the expert

Name and Designation

**APPENDIX - VII**  
**LIST OF EXPERTS FOR CONTENT VALIDITY**

1. **Dr. Latha Venkatesan,**  
**M.Sc (N)., M.Phil (N)., Ph.D (N), M.B.A.(HM),**  
Principal and Professor in Nursing,  
Apollo College of Nursing,  
Chennai – 600 095.
2. **Mrs. Lizy Sonia A., M.Sc., (N).,**  
Vice Principal and Professor in Nursing,  
Apollo College of Nursing,  
Chennai – 600 095.
3. **Dr. Gowrimeena M.D., (OG)., DNB (OG)., CIMP., MRCOG (UK).,**  
Laparoscopic Surgeon, Infertility Specialist,  
Consultant, Obstetrician and Gynecologist,  
Apollo specialty Hospitals,  
Vanagaram, Chennai – 600 095.
4. **Prof. K. Vijayalakshmi, M. Sc., (N)., M. A. Psychology,**  
H.O.D., Department of Mental Health Nursing,  
Apollo College of Nursing, Chennai.
5. **Mrs. V. Dhanalakshmi, M. Sc., (N).,**  
Reader, Department of Obstetrics and Gynecological Nursing  
Apollo College of Nursing, Chennai.
6. **Ms. Urmila U., M. Sc., (N).,**  
Lecturer, Department of Obstetrics and Gynecological Nursing Apollo  
College of Nursing, Chennai.

## APPENDIX - VIII

### RESEARCH PARTICIPANT CONSENT FORM

Dear participant,

I am Ms. Poonthalir .V, II year M.Sc., Nursing student of Apollo College of Nursing, Chennai. As a part of my study, I have selected a research project on **“Effectiveness of capacity building program of nursing students in positive therapy for management of stress in infertile women upon the knowledge and skills of Nursing students”** I hereby seek your consent and cooperation to participate in the study. Kindly be frank and honest in your opinions. The information collected will be kept confidential and anonymity will be maintained throughout and after the study.

Signature of the Researcher

I, ....., hereby consent to participate and undergo the study.

Date:

Place:

Signature of the Participant

## APPENDIX - IX

### CERTIFICATE FOR ENGLISH EDITING

#### TOWHOMSOEVER IT MAY CONCERN

This is to certify that the dissertation entitled “An Experimental Study to assess the Effectiveness of Capacity Building Program on Positive Therapy for Management of Stress in Infertile Women upon the Knowledge and Skills of Nursing Students” by Poonthalir vijayakumar, II year M.Sc. Nursing student of Apollo College of Nursing, was edited for English Language appropriateness.

**Prof. J.L. NARASIMHAN**  
New No.8, Second Main Road,  
Block B - F1, Krishna Nagar,  
Chromepet, Chennai-600 044.  
Cell : 94446 54720  
e-mail : profjin@yahoo.com

  
Signature

## APPENDIX - X

### CERTIFICATE FOR POSITIVE THERAPY

#### CERTIFICATE OF TRAINING IN POSITIVE THERAPY

Dr. Hemalatha Natesan  
Professor of Psychology(Rtd)  
Avinashilingam University for Women  
Coimbatore -641043

Residence: No:7, Kamarajar III cross  
Kaveri Nagar, K.K. Pudur  
Coimbatore - 641038  
Phone: 0422 - 2441757

#### CERTIFICATE

This is to certify that **Ms Poonthalir,V.** A student of M.Sc (Nursing) from Apollo College of Nursing, Chennai, is trained in **Positive Therapy**.

Her project work is entitled, 'An Experimental Study to Assess the Effectiveness of Capacity Building Program of Nursing Students in Positive Therapy for Management of Stress of Infertile Women upon Knowledge and Skills of Students at Selected Nursing Colleges in Chennai'. As she is well trained in administering the various strategies of Positive Therapy, she can apply Positive Therapy for enhancing the knowledge and skills of selected II year B.Sc. Nursing Students.

11-6-2015

*Hemalatha Natesan*  
Dr .Hemalatha Natesan

**APPENDIX - XI**  
**DEMOGRAPHIC VARIABLE PROFORMA**

**Purpose:** This proforma is used to measures the demographic variable such as age, Experience in caring infertile women, Religions, Native places, Previous knowledge about positive therapy, Prior knowledge about infertility.

**Instructions:** Please answer the following questions. Circles the appropriate options. Please be frank and free in answering questions.

**1. Age in years**

- 1.1 <20
- 1.2 20 - 22
- 1.3 22 – 24
- 1.4 > 24

**2. Experience in caring infertile women**

- 2.1 Yes
- 2.2 No

If yes specify the year of Experience.....

Nature of care .....

**3 Religion**

- 3.1 Hindu
- 3.2 Christian
- 3.3 Muslim

**4. Native state**

- 4.1 Tamilnadu
- 4.2 Kerala
- 4.3 Other state

If other state specify .....

**5. Pervious knowledge about infertility**

- 5.1 Yes
- 5.2 No

If yes, specify source of information

**6 . Prior knowledge about positive therapy**

- 6.1 Yes
- 6.2 No

If yes, specify the source of information



## APPENDIX - XII

### STRUCTURED QUESTIONNAIRE TO ASSESS THE KNOWLEDGE OF STUDENTS IN THE MANAGEMENT OF STRESS IN INFERTILE WOMEN

**Purpose:** This tool is designed to assess the knowledge of Nurses about facts of infertility including causes, investigations and management of infertility, psycho social impact of infertility and positive Therapy for stress reduction in infertile women .The information collected will be used for research purpose only and anonymity will be maintained.

**Instructions :** There are 40 questions. Kindly read the question has got 4 options given as answer. Circle the most appropriate for each question.

**Scoring:** Appropriate answer for each question will carry one mark. There is no negative marking for wrong answer, The overall score will be interpreted as Adequate ( 75 - 100 ), Moderately adequate ( 50 – 74), Inadequate ( Below 50 ).

1. Infertility is inability to conceive with regular un protected intercourse even after

- a. 24 months
- b.18 months
- c. 12 months
- d. 6 months

2. When a women is not able to become pregnant after previous pregnancy it is called

- a. Primary infertility
- b. Secondary infertility
- c. Idiopathic infertility
- d. Disability

3. After age of 30 the chances of becoming pregnant decreases by
- 10- 15 % every year
  - 15 – 20 % every year
  - 3 – 5 % every year
  - 5 – 10 % every year
4. Damage to the fallopian tubes may cause infertility by preventing
- Motility of the sperm
  - Contact between ovum and the sperm
  - Ovulation
  - Implantations
5. The major cause of infertility in women is
- An ovulations
  - Unexplained
  - Tubal infections
  - Uterine fibroids
6. The three classical symptoms of irregular menstrual periods, masculinisations and obesity are seen in
- Hypo thyroidism
  - Polycystic ovarian syndrome
  - Hyper prolactinemia
  - Luteal phase defect
7. The normal sperm concentration is
- $>5 \times 10^6$  /ml
  - $> 10 \times 10^6$  /ml
  - $> 40 \times 10^6$  /ml
  - $>20 \times 10^6$  /ml
8. During semen analysis, a man should avoid ejaculations ( sex and masturbations) for
- Four to seven days before providing the semen sample
  - Three to seven days before providing the semen sample
  - Two to seven days before providing the semen sample

- d. Five to seven days before providing the semen samples
9. The Hysterosalpingogram image below can be interpreted as
- a. Left tubal block
  - b. Right tubal block
  - c. Normal with filling and spilling
  - d. Hydrosalpinx
10. Hysterosalpingogram is usually performed
- a. Five to seven days after the menstrual periods
  - b. Two to three days the menstrual periods
  - c. During menstruation
  - d. Before menstruation
11. Barrier contraception's should be used when women has to undergo
- a. Hysterosalpingogram
  - b. Laparoscopy
  - c. Colposcopy
  - d. Pap smear
12. Follicle stimulating hormones levels (FSH) are checked usually on which day of the menstrual cycle ?
- a. 5<sup>th</sup> day
  - b. 7<sup>th</sup> day
  - c. 14<sup>th</sup> day
  - d. 3<sup>rd</sup> day
13. The commonly used first line of drug for inducing ovulations is
- a. Bromocriptine
  - b. Clomiphene citrate
  - c. Triptorelin
  - d. Human menopausal gonadotropin
14. When a women has anti sperm antibodies the best choice is to undergo
- a. Ovulations
  - b. In vitro fertilizations
  - c. Intra uterine inseminations (IUI)
  - d. Zygote intra fallopian transfer

15. When a women has bilateral tubal block the best choice is to undergo
- Ovulations
  - In vitro fertilizations
  - Intra uterine inseminations ( IUI)
  - Tubal resections
16. The procedure done during severe male factors infertility is
- Gamete intra fallopian transfer (GIFT)
  - Zygote intra fallopian transfer (ZIFT)
  - Cryopresevations of embryos
  - Intra cytoplasmic sperm injections (ICSI)
17. In IVF the embryo are transferred usually in
- 4 cell stage
  - 8 cell stage
  - 12 cell stage
  - 10 cell stage
18. The common complications of IVF is
- Developing fibroids
  - Conjoint twins
  - Multiple pregnancy
  - Infections
19. The sense of extreme isolations in females due to infertility is
- High levels of negative emotions
  - Fear
  - Anger
  - Personality disorders
20. The infertile women commonly find it difficult to interact with
- Other infertile couple
  - Family members
  - Couples having children
  - Friend work place

21. Pressure to conceive from family members may results in
- Anxiety
  - Helplessness
  - Hopelessness
  - Withdrawal of treatment
22. Feelings of hopeless and helplessness in infertile women are sign of
- Fear
  - Anxiety
  - Depression
  - Insomnia
23. The worst kind of fear in infertile women about their married life is
- Their partner may get separated away if they don't have a child
  - Their partner may argue with them
  - Their partner may not co operate with them for all treatment
  - Their partner may be disappointed
24. when there is infertility the society commonly lays the blame on
- Entire family
  - Men
  - Both husband and wife
  - Women
25. The physiological effect on stress is
- Excessive urination
  - Increased blood pressure and tightening of muscles
  - Increased attention span
  - Excessive sleep
26. The impact of stress on reproductive hormones is that
- It increases the production of Gonadotropin-Inhibitory Hormone (GnIH)
  - It increases the production of Gonadotropin-Releasing Hormone (GnRH)
  - It increases the production of Follicle Stimulating Hormone (FSH)
  - It increases the production of Luteinizing Hormone (LH)

27. In infertile women the stress may commonly lead to problems with
- Ovulation
  - Implantation of embryos
  - Endometrial thickness
  - Fetal development
28. The stress influences treatment seeking behavior of infertile women to
- The nature of the treatment
  - Withdraw from treatment and accept infertility
  - To go for adoption
  - Opt for surrogacy
29. Commonly used method for Stress Reduction for Infertile couple is
- Relaxation Therapy
  - Counselling
  - Yoga
  - Aerobic exercises
30. Main limitation of Counselling for infertile couple is
- Negligence
  - Negative approach
  - Distressing nature of infertility
  - Less awareness about it
31. Positive therapy is combination of
- Relaxation Therapy and Counselling
  - Relaxation, Cognitive restructuring and tension releasing exercises
  - Exercises and behavioral assignments
  - Relaxation Therapy and Behavioral Assignments.
32. The impact of Positive Therapy is
- Negative thoughts are replaced by Positive thoughts
  - Positive thoughts are replaced by Negative thoughts
  - To maintain thoughts
  - Nowhere related to thought process

33. Relaxation Therapy for infertile women involves
- a. Head to Foot
  - b. The lower abdomen
  - c. Head and lower back
  - d. chest
34. Deep Breathing involves
- a. Head to Foot and Breathe out fast
  - b. Breathe in Slow and Breathe out fast
  - c. Breathe in fast and Breathe out Gradually
  - d. Breathe in Slow and Breathe out Gradually
35. The best time for doing relaxation therapy is
- a. Anytime
  - b. Midday and Night
  - c. Early in the morning and Before going to bed
  - d. Early in the morning and before going to lunch
36. In Positive Therapy counselling involves
- a. Thoughts Stopping and Cognitive Reconstructing
  - b. Thought Generating and Cognitive Reconstructing
  - c. Thoughts Stopping and Cognitive constructing
  - d. Thoughts Generating and Cognitive modeling
37. Tension Releasing Exercises helps mainly the women
- a. To develop confidence
  - b. Throw out the fear and negative emotions
  - c. To develop communication
  - d. To maintain silence
38. Smiling therapy makes the mother to
- a. Close the mouth smilingly and breath out gradually through the nose without any sound
  - b. Close the mouth smilingly and breath out gradually through the nose with sound

- c. Open the mouth smilingly and breath out gradually through the nose without any sound
  - d. Laugh loudly and breathe out gradually through the nose without any sound
39. Laughter therapy promotes the sense of well -being by
- a. Relaxing the body
  - b. Increasing hope
  - c. By releasing endorphins
  - d. By protecting the heart
40. Cognitive reconstructing which includes the infertile women need to have
- a. Auto suggestion of positive thoughts
  - b. Auto suggestion of Negative thoughts
  - c. Comparisons of Positive and Negative thoughts
  - d. Neutral thoughts



**STRUCTURED QUESTIONNAIRE TO ASSESS THE  
KNOWLEDGE OF STUDENTS IN THE MANAGEMENT OF  
STRESS IN INFERTILE WOMEN**

**Answer key :**

<b>S.no</b>	<b>Key</b>	<b>S.no</b>	<b>Key</b>	<b>S.no</b>	<b>Key</b>	<b>S.no</b>	<b>Key</b>	<b>S.no</b>	<b>Key</b>
1.	C	2.	B	3.	C	4.	B	5.	A
6.	B	7.	D	8.	C	9.	C	10.	A
11.	B	12.	D	13.	B	14.	C	15.	B
16.	D	17.	B	18.	C	19.	A	20.	C
21.	A	22.	C	23.	A	24.	D	25.	B
26.	A	27.	B	28.	A	29.	B	30.	C
31.	B	32.	A	33.	A	34.	D	35.	C
36.	A	38.	B	38.	A	39.	C	40.	A

**SCORING**

**Percentage**

75 – 100

50 – 74

Below 50

**Levels of Knowledge**

Adequate knowledge

Moderately adequate knowledge

In adequate knowledge

**APPENDIX - XIII**  
**BLUE PRINT FOR STRUCTURED**

<b>S.no</b>	<b>Content</b>	<b>Items</b>	<b>Total Items</b>	<b>Percentage</b>
<b>I</b>	Facts on Infertility; Definition, Causes	1,2,3,4,5,6	06	15%
<b>II</b>	Investigations of infertility	7,8,9,10,11,12	06	15%
<b>III</b>	Medical management of Infertility	13,14,15,16,17,18	06	15%
<b>IV</b>	Psychological & Social impact of infertility	19,20,21,22,23,24,	06	15%
<b>V</b>	Stress and infertility	25,26,27,28,29,30	06	15%
<b>VI</b>	Role of positive therapy in stress reduction	31,32,33,34,35,36,37,39,40	10	25%
		<b>Total</b>	<b>40</b>	<b>100%</b>

**APPENDIX - XIV**

**RATING SCALE ON THE LEVEL OF SATISFACTION OF STUDENTS**

**ON POSITIVE THERAPY**

**Purpose**

This rating scale is designed to assess the level of satisfaction of the sample in the experimental group regarding positive therapy.

**Instruction**

There are 10 items below. kindly read the items. Response extends from highly satisfied, satisfied, dissatisfied, highly dissatisfied. Put a tick mark against your answers. Describe your response freely and frankly. The response will be kept confidential and used for research purpose only.

S.NO	ITEMS	Highly Satisfied	Satisfied	Dis satisfied	Highly Dissatisfied
1	Explanation regarding positive therapy				
2	Approach of the Researcher				
3	Time spend by the Researcher				
4	Duration of the Programme				
5	Arrangement made during the programme				
6	The programme was easy to To Understand				
7	Uses of audio visual aids				
8	It helps in relaxing				
9	Given at the appropriate time				
10	Easy to follow				

## **SCORING**

Highly dissatisfied - 1

Dissatisfied - 2

Satisfied - 3

Highly satisfied - 4

The total score is converted into percentage and graded as given below.

## **SCORING KEY :**

<b>SCORING</b>	<b>INTERPRETATION</b>
Highly satisfied	<76-100%
Satisfied	50-75%
Dissatisfied	25-49%
Highly dissatisfied	1 - 24% and below

**APPENDIX - XV**  
**BLUE PRINT FOR LEVEL OF SATISFACTION ON POSITIVE**  
**THERAPY**

<b>S.NO</b>	<b>CONTENT</b>	<b>ITEM NO</b>	<b>TOTAL</b>	<b>PERCENTAGE</b>
1	Researcher	1,2,3,4	4	40%
2	Positive Behaviour therapy	5,6,7,8	4	40%
3	Effectiveness of the positive Behaviour therapy	9,10	2	20%
		<b>TOTAL</b>	10	100%

## APPENDIX - XVI

### CHECK LIST TO ASSESS THE SKILLS ON POSITIVE THERAPY

**Purpose:** This tool is designed to assess the skills of nursing students about positive therapy for management for stress in infertile women .The information collected will be used for research purpose only and anonymity will be maintained.

**Scoring :** It consists of 8 items. With options such as done and Not done. and scores as 1 and Zero respectively. Thus total obtainable score is 0 – 8 Obtainable score is converted into percentage and interpreted as follows.

Tick the appropriate one which is given in the column

S.NO	STEPS	DONE	NOT DONE
1	<p>RELAXTION THERAPY</p> <p><b>a. Deep breathing practice</b></p> <p>Sit erect, head, back straight, Palms on the lap, feet placed on the floor, one foot apart</p> <p>Breath in slowly for 4 counts (4 seconds) Breath out gradually</p> <p>6 counts (6 seconds)</p> <p>Repeat this with eyes opened for 5 times and eyes closed for 5 times.</p> <p><b>b. Relaxation training</b></p> <p>Lie down flat on the mat without a pillow, with the head</p> <p>Straight palms facing upwards and legd stretched with one foot</p> <p>Apart and close your eyes Breathe in slowly..... and Breath out gradually ....repeat for 3 times.</p>		

	<p><b>c. Autosuggestion</b></p> <p>Continue the lying down posture enjoying the relaxed state, with deep breathing</p> <p>Have the Autosuggestion (3 times 0 each</p> <p>Example I am happy</p> <p>I am healthy</p>		
2.	<p><b>COUNSELLING</b></p> <p><b>d. Thought stopping</b></p> <p>(For demonstration only)</p> <p>Identify the recurring negative thoughts which disturb you</p> <p>Close the eyes , breath in slowly..... deliberately get the disturbing thoughts and breath out say STOP push thoughts away and open the eyes</p> <p>practices for 3 times.</p> <p><b>e. Cognitive Restructuring</b></p> <p>(For demonstration only)</p> <p>The individual is asked to breath in slowly (for 4 counts) tell out one positive statements such as</p> <p>“I will conceive”</p> <p>“I will deliver a healthy baby” and breath out smilingly</p> <p>(3 times)</p>		
3	<p><b>EXERCISES</b></p> <p><b>f. Tension releasing exercise</b></p> <p>The individual is asked to stand with feet one foot part, close the palms, and bring them towards the chest</p>		

	<p>breathe in slowly</p> <p>then breathe out forcefully through the mouth</p> <p>making sound</p> <p>(Ha) simultaneously throwing down the hand</p> <p>sidewise out (3times)</p> <p><b>g. Smile therapy</b></p> <p>Say (Eee) with broad smile, breathe in slowly</p> <p>through the</p> <p>mouth, with a sound (without involving the vocal</p> <p>cord)</p> <p>Close the mouth smilingly breathe out gradually</p> <p>through the</p> <p>Nose without any sound (5 times)</p> <p><b>h. Laugh therapy</b></p> <p>Stand and bend down the back and head slightly,</p> <p>breathe in slowly, lift up the head, start laughing</p> <p>loudly without any</p> <p>Inhibitions (5 times).</p>		
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## SCORING

S.NO	SCORE	INTERPRETATION
1	80 – 100	Excellent
2	60 – 79	Very good
3	40 – 59	Good
4	20 – 39	Average
5	<20	Poor



**APPENDIX - XVII**  
**BLUE PRINT FOR POSITIVE THERAPY CHECK LIST**

<b>S.NO</b>	<b>CONTENT</b>	<b>ITEMS</b>	<b>TOTAL ITEMS</b>	<b>PERCENTAGE</b>
1	Relaxation therapy	a,b,c	3	37.5%
2	Counseling	d,e	2	25%
3	Exercise	f,g,h	3	37.5%
		<b>Total</b>	8	100%

**APPENDIX XVIII**  
**CONTENT OF POSITIVE THERAPY**

**TOPIC** : POSITIVE THERAPY  
**GROUP** : B.SC NURSING II YEAR  
**DURATION** : TWO HOUR  
**METHOD OF TEACHING** : LECTURE CUM DEMONSTRATION

**OBJECTIVES**

The students are able to

1. Explain what is positive therapy.
2. Justify the need for positive therapy for management of stress of infertile women.
3. Practice relaxation therapy
4. Ventilate their feelings during counseling.
5. Demonstrate stress reducing exercises
6. Carry out behavioral assignments.

Specific objectives	Content	Learning activities
Introduce Positive therapy	<ul style="list-style-type: none"> <li>➤ Stress is inevitable nowadays; Stress affects the physical, mental and social wellbeing of a person.</li> <li>➤ Positive therapy is a package, combining the eastern techniques based on yoga and western techniques based on the Cognitive Behavior therapies.</li> <li>➤ It has four major strategies. <ul style="list-style-type: none"> <li>✓ Relaxation therapy</li> <li>✓ Counseling</li> <li>✓ Exercises</li> <li>✓ Behavioral assignments.</li> </ul> </li> <li>➤ Negative thoughts lead to negative beliefs, which are more often irrational.</li> <li>➤ Positive therapy aims at modifying negative thoughts, beliefs, emotions and behavior using number of techniques.</li> <li>➤ It is assumed that when negative thoughts are replaced by positive thoughts, the women become more realistic and reasonable in his/ her perceptions.</li> </ul>	Listening
Justify the need for positive therapy for management of stress of infertile women		Listening
Practice Relaxation Therapy	<p><b>RELAXATION THERAPY</b></p> <ul style="list-style-type: none"> <li>➤ One cannot be tensed and relaxed at the same time.</li> </ul>	

	<ul style="list-style-type: none"> <li>➤ Relaxation therapy helps to have a relaxed state, which promote positive attitude towards life.</li> <li>➤ In the counseling sessions, students respond better to the therapy when they are in the relaxed state.</li> <li>➤ Hence Relaxation therapy is given as the first step in Positive therapy.</li> <li>➤ Relaxation therapy involves three steps <ul style="list-style-type: none"> <li>✓ Deep breathing practice</li> <li>✓ Relaxation training</li> <li>✓ Auto suggestion</li> </ul> </li> </ul> <p><b>Deep breathing practice</b></p> <ul style="list-style-type: none"> <li>➤ In deep breathing practice, the students is asked to sit erect, with head straight, palms on the lap and feet placed on the floor, one foot apart.</li> <li>➤ The students are instructed to breathe in slowly for 4 counts (4 sec) and breathe out gradually for 5 counts.</li> <li>➤ This is repeated 5 times with the eyes opened and 5 times with the eyes closed. Breathing in and breathing out should be gradual without any jerks and there should not be any tension on the chest and shoulders.</li> </ul> <p><b>Relaxation Training</b></p> <ul style="list-style-type: none"> <li>➤ After the deep breathing practice, the students is asked to lie down flat</li> </ul>	<p>co – operates and follows instruction</p>
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	<p>on the mat or a cot without a pillow, with the head straight , lips slightly apart, hands comfortably placed on the sides, palms facing upwards and legs stretched, with feet one foot apart.</p> <ul style="list-style-type: none"> <li>➤ She is asked to close the eyes and a folded hand kerchief placed on the eyes to ensure complete darkness.</li> <li>➤ The nose should not covered. the counselor/ therapist gives the following instructions: <ul style="list-style-type: none"> <li>- “Breathe in slowly.....Breathe out gradually.....” (This is repeated for 3 times).</li> <li>- “Now concentrate on the top of the head”.</li> <li>- “Breathe in slowly.....Breathe out gradually.....”Top of the head.....Relax.....”.</li> </ul> </li> <li>➤ This is repeated 3 times, followed by the counselors suggestions:</li> <li>➤ “now, the top of the head is light and relaxed, no thoughts, no fears, no worries, no tension, no stress, no pain. <ul style="list-style-type: none"> <li>➤ Top of the head is light and relaxed, top of the head is light and relaxed, top of the head is light and relaxed.</li> <li>➤ Breathe in slowly..... Breathe out gradually.....” back of the head, forehead, eyes, mouth, neck and shoulders, back, chest, stomach, hands and legs.</li> <li>➤ Similar instructions are given to the other parts in the order given</li> </ul> </li> </ul>	<p>Practices following instructions.</p>
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	<p>below, the counselor gives the following directions to the individual who is in a relaxed state. Inhale POSITIVE THOUGHTS. Breathe out all the negative, useless thoughts from the body.</p> <ul style="list-style-type: none"> <li>➤ Inhale GOOD HEALTH. Breathe out all the aches, pains and sicknesses from the body.</li> <li>➤ Inhale STRENGTH. Breathe out all the weaknesses from the body. Inhale HAPPINESS.</li> <li>➤ Breathe out all the worries from the body.</li> <li>➤ Inhale COURAGE AND CONFIDENCE. Breathe out all the fears from the body.</li> <li>➤ Inhale SUCCESS. Breathe out failures and fears of failures from the body.</li> <li>➤ Inhale LOVE. Breathe out hatred and anger from the body.</li> </ul> <p><b>Auto suggestion</b></p> <ul style="list-style-type: none"> <li>➤ In this stage also, the individual continuous to be in the lying posture, enjoying the relaxed state.</li> <li>➤ The therapist / counselor gives the following auto suggestion (3 times each).</li> </ul> <p>“I am healthy I am happy I love everyone; everyone loves me</p>	
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<p>Ventilate their feelings</p>	<p>I am not afraid of anybody; God is with me</p> <p>I am bold and confident</p> <p>I can achieve what I want</p> <p>I can face my problems boldly and solve them successfully</p> <p>Today is an excellent day; I will enjoy every minute of this day</p> <p>Thank you God for giving my family and me all that we need – long life, good health, wealth, love, happiness and success”.</p> <p>The best results of Relaxation therapy can be achieved, if practiced twice a day, preferably early in the morning and night before going to sleep. The ideal time limit is 20 minutes.</p> <p>Lying down flat on a mat or on a cot (without a pillow) is the best posture for Relaxation therapy.</p> <p>Anyway, it can also be practiced in the sitting posture.</p> <p><b>COUNSELLING</b></p> <p>In the Positive therapy , counseling involves the following techniques:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Stopping Negative Thoughts</li> <li><input type="checkbox"/> Instilling Positive Thoughts</li> </ul> <p><b>Thought stopping</b></p> <ul style="list-style-type: none"> <li>➤ In this, the individual is asked to identify the recurring negative</li> </ul>	
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	<p>thoughts, which disturb him.</p> <ul style="list-style-type: none"><li>➤ Then she is asked to close the eyes, breathe in slowly, deliberately get the disturbing thought and breathe out saying “stop”, push the thought away and open the eyes.</li><li>➤ Whenever unwanted negative thoughts occur, the individual is instructed to say “stop” (mentally) and throw away the negative thoughts.</li><li>➤ In due course, the students learns to throw out unwanted negative thoughts automatically.</li></ul> <p><b>Instilling Positive Thoughts</b></p> <ul style="list-style-type: none"><li>➤ In this, the students are asked to breath in slowly and breath out slowly by saying “ I am healthy”</li></ul> <table><tr><th>Negative thoughts</th><th>Positive thoughts</th></tr><tr><td>I am dull</td><td>I am intelligent</td></tr><tr><td>I cannot do anything properly</td><td>I can achieve what I want</td></tr><tr><td>Negative thoughts</td><td>Positive thoughts</td></tr><tr><td>I am a failure</td><td>I am a successful person</td></tr><tr><td>I am always sick</td><td>I am healthy</td></tr><tr><td>My future is hopeless</td><td>My future is bright</td></tr><tr><td>Nobody likes me</td><td>Everybody likes me</td></tr></table> <ul style="list-style-type: none"><li>➤ The students are asked to believe that they have acquired the positive qualities and behave accordingly.</li></ul>	Negative thoughts	Positive thoughts	I am dull	I am intelligent	I cannot do anything properly	I can achieve what I want	Negative thoughts	Positive thoughts	I am a failure	I am a successful person	I am always sick	I am healthy	My future is hopeless	My future is bright	Nobody likes me	Everybody likes me	
Negative thoughts	Positive thoughts																	
I am dull	I am intelligent																	
I cannot do anything properly	I can achieve what I want																	
Negative thoughts	Positive thoughts																	
I am a failure	I am a successful person																	
I am always sick	I am healthy																	
My future is hopeless	My future is bright																	
Nobody likes me	Everybody likes me																	







	<p>loudly without inhibition. They are encouraged to make gestures, clap hands, and look at each other while laughing. They are asked to laugh louder and louder, for a longer duration.</p> <p><b>BEHAVIORAL ASSIGNMENTS</b></p> <ul style="list-style-type: none"> <li>➤ Have a daily routine as indicated below :</li> <li>➤ Have positive thoughts. Modify the negative thoughts with positive thoughts</li> <li>➤ Involve in some activity and enjoy it</li> <li>➤ Accept responsibilities with a smile</li> <li>➤ Have positive attitude towards self, life and others</li> <li>➤ Live in the present; concentrate on what you do and enjoy it</li> <li>➤ Involve in some activity and enjoy it</li> <li>➤ Accept responsibilities with a smile</li> <li>➤ Enjoy the company of friends</li> <li>➤ Face problems boldly and solve them successfully</li> <li>➤ Share your joys and sorrows with friends</li> <li>➤ Have physical exercise walking/jogging/cycling/swimming/yoga</li> <li>➤ Have recreation - play games, read magazines/books, watch television</li> <li>➤ Enjoy music; sing and dance to release tension</li> </ul>	
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	<ul style="list-style-type: none"> <li>➤ Develop a sense of humor; enjoy jokes; laugh heartily</li> <li>➤ Practice Deep Breathing</li> <li>➤ Practice Relaxation Therapy twice a day</li> <li>➤ Practice Tension Releasing Exercise</li> <li>➤ Practice Smile Therapy and Laugh Therapy with family/friends</li> <li>➤ Avoid poor health habits such as smoking, drinking and taking drugs</li> <li>➤ Pray to God</li> </ul> <p><b>SUMMARY</b></p> <ul style="list-style-type: none"> <li>➤ It improves their mental health by helping the management of negative emotions such as fear, anger, worry etc. and promotes courage, cheerfulness and assertiveness.</li> <li>➤ Once the stress is reduced through Positive Therapy automatically physical and mental health is improved.</li> <li>➤ The therapy has to be practiced a minimum of twice in a day.</li> </ul>	
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## **APPENDIX - XIX**

### **DATA CODE SHEET**

#### **DEMOGRAPHIC VARIABLEPROFORMA OF B.Sc NURSING IIEAR**

**Sample No:**

**1. AGE – Age in years**

- 1.1 <20
- 1.2 20 - 22
- 1.3 22 – 24
- 1.4 > 24

**2. ECIW -Experience in caring infertile women**

- 2.1 Yes
- 2.2 No

**3. Religion - RELIGION**

- 3.1 Hindu
- 3.2 Christian
- 3.3 Muslim

**4. NS – Native state**

- 4.1 Tamilnadu
- 4.2 Kerala
- 4.3 Other state

**5. PKI – Pervious knowledge about infertility**

- 5.1 Yes
- 5.2 No

**6. PK PT – Prior knowledge about positive therapy**

- 6.1 Yes
- 6.2 No

## APPENDIX - XX

### MASTER CODE SHEET

CONTROL GROUP									EXPERIMENTAL GROUP									
S.NO	Demographic variables					Cognitive score			Demographic variables					Cognitive score				
	Age	ECIW	Religion	NS	PKT	PKPT	Pretest	Post test	Age	ECIW	Religion	NS	PKT	PKPT	Pretest	Post test	LOS	LOS
1	1.2	2.2	3.1	4.1	5.2	6.2	19	20	1.2	2.2	3.3	4.1	5.1	6.1	18	31	35	8
2	1.1	2.1	3.2	4.2	5.2	6.2	22	22	1.1	2.1	3.1	4.1	5.1	6.1	15	32	28	8
3	1.1	2.2	3.2	4.1	5.2	6.2	21	18	1.2	2.1	3.2	4.1	5.1	6.1	22	31	22	8
4	1.1	2.2	3.2	4.1	5.1	6.2	16	17	1.1	2.1	3.1	4.1	5.1	6.1	21	30	40	8
5	1.1	2.2	3.2	4.1	5.1	6.2	18	14	1.2	2.1	3.2	4.1	5.1	6.1	14	29	40	8
6	1.2	2.2	3.1	4.1	5.1	6.2	11	10	1.1	2.1	3.2	4.2	5.1	6.1	16	30	29	8
7	1.1	2.2	3.1	4.4	5.1	6.2	22	20	1.2	2.1	3.2	4.2	5.1	6.2	20	35	32	8
8	1.1	2.2	3.1	4.2	5.1	6.2	20	19	1.1	2.1	3.2	4.1	5.2	6.2	18	34	30	8
9	1.1	2.2	3.1	4.2	5.2	6.2	18	18	1.2	2.1	3.1	4.2	5.2	6.1	16	37	28	8
10	1.1	2.1	3.2	4.2	5.1	6.2	16	17	1.2	2.1	3.1	4.2	5.2	6.1	15	29	30	8
11	1.1	2.2	3.1	4.1	5.1	6.2	18	17	2.1	2.1	3.2	4.1	5.2	6.1	21	33	30	7
12	1.1	2.2	3.2	4.2	5.2	6.2	17	18	1.2	2.1	3.1	4.1	5.2	6.2	19	34	26	8
13	1.1	2.2	3.1	4.2	5.1	6.1	20	19	1.1	2.1	3.2	4.2	5.2	6.1	22	31	39	8
14	1.1	2.2	3.2	4.1	5.2	6.2	13	13	1.2	2.1	3.1	4.2	5.1	6.1	21	33	36	8
15	1.2	2.1	3.3	4.1	5.1	6.2	12	12	1.1	2.1	3.1	4.1	5.1	6.1	16	35	36	8
16	1.1	2.2	3.2	4.1	5.2	6.2	18	18	1.1	2.1	3.1	4.1	5.2	6.1	18	36	36	8
17	1.2	2.2	3.2	4.1	5.1	6.2	16	17	1.2	2.1	3.1	4.1	5.1	6.2	11	30	32	8
18	1.1	2.2	3.2	4.1	5.1	6.1	21	20	1.1	2.1	3.2	4.1	5.2	6.2	22	38	30	8
19	1.1	2.2	3.1	4.2	5.1	6.2	22	21	1.1	2.1	3.2	4.1	5.2	6.2	20	31	32	8
20	1.1	2.2	3.2	4.1	5.1	6.2	15	15	1.1	2.2	3.2	4.1	5.1	6.1	18	34	31	8
21	1.1	2.2	3.2	4.1	5.2	6.2	14	13	1.1	2.2	3.2	4.2	5.2	6.1	16	30	30	8
22	1.2	2.2	3.1	4.2	5.1	6.1	17	18	1.2	2.2	3.1	4.1	5.2	6.2	18	31	27	8
23	1.1	2.2	3.2	4.1	5.1	6.1	16	16	1.1	2.2	3.1	4.1	5.1	6.2	17	33	37	8
24	1.2	2.2	3.2	4.1	5.2	6.2	18	18	1.2	2.2	3.1	4.1	5.1	6.1	20	28	30	8
25	1.2	2.1	3.1	4.2	5.2	6.2	20	21	1.2	2.2	3.1	4.1	5.1	6.2	13	25	26	8
26	1.1	2.2	3.1	4.2	5.1	6.2	15	20	1.1	2.2	3.1	4.1	5.2	6.2	18	26	35	8
27	1.1	2.2	3.1	4.1	5.1	6.2	16	15	1.1	2.2	3.1	4.1	5.2	6.2	16	31	30	8
28	1.2	2.2	3.1	4.2	5.1	6.2	21	16	1.2	2.2	3.2	4.1	5.2	6.2	14	38	38	8
29	1.2	2.2	3.2	4.1	5.1	6.2	22	21	1.2	2.2	3.1	4.1	5.2	6.2	17	33	29	8
30	1.1	2.2	3.1	4.1	5.2	6.1	23	22	1.1	2.2	3.1	4.1	5.1	6.2	16	31	34	8
31	1.1	2.2	3.1	4.1	5.1	6.1	18	21	1.1	2.2	3.1	4.1	5.1	6.1	23	30	30	8
32	1.2	2.2	3.1	4.1	5.1	6.2	17	19	1.2	2.2	3.2	4.2	5.1	6.2	18	31	30	8
33	1.1	2.1	3.1	4.1	5.1	6.2	12	15	1.1	2.2	3.1	4.1	5.1	6.2	14	38	30	8
34	1.1	2.1	3.1	4.1	5.1	6.2	14	11	1.1	2.2	3.1	4.1	5.1	6.2	19	36	35	8
35	1.1	2.1	3.1	4.2	5.1	6.2	15	13	1.1	2.2	3.1	4.1	5.1	6.2	22	36	35	7
36	1.1	2.1	3.1	4.2	5.1	6.2	21	11	1.1	2.2	3.1	4.1	5.1	6.2	16	31	38	8
37	1.3	3.1	3.2	4.1	5.1	6.1	18	16	1.1	2.2	3.2	4.2	5.2	6.1	18	34	34	8
38	1.3	2.2	3.1	4.2	5.1	6.2	16	18	1.1	2.2	3.1	4.1	5.1	6.2	14	33	40	8
39	1.2	2.2	3.2	4.1	5.1	6.2	14	13	1.2	2.2	3.2	4.1	5.1	6.2	15	31	30	8
40	1.2	2.2	3.2	4.1	5.1	6.2	15	15	1.2	2.2	3.2	4.1	5.1	6.2	20	30	38	8
41	1.1	2.2	3.1	4.1	5.2	6.2	18	19	1.1	2.2	3.1	4.1	5.1	6.1	18	35	35	8
42	1.1	2.2	3.1	4.1	5.2	6.2	21	20	1.1	2.2	3.1	4.1	5.1	6.2	22	36	40	8
43	1.1	2.2	3.1	4.1	5.1	6.2	20	19	1.1	2.2	3.1	4.3	5.1	6.2	23	33	40	8
44	1.1	2.2	3.2	4.1	5.1	6.2	16	15	1.1	2.2	3.1	4.1	5.2	6.2	18	31	38	8
45	1.1	2.2	3.1	4.1	5.1	6.2	14	14	1.1	2.2	3.1	4.1	5.1	6.2	17	29	35	8
46	1.1	2.2	3.2	4.1	5.2	6.2	21	20	1.1	2.2	3.1	4.1	5.2	6.2	16	28	28	8
47	1.2	2.2	3.2	4.1	5.2	6.2	22	21	1.2	2.2	3.1	4.2	5.1	6.2	20	31	31	8
48	1.1	2.1	3.2	4.1	5.2	6.2	15	14	1.1	2.2	3.2	4.1	5.1	6.2	21	33	35	8
49	1.1	2.1	3.1	4.1	5.2	6.1	16	17	1.1	2.2	3.1	4.1	5.2	6.1	19	35	36	8

**APPENDIX - XXI**  
**PHOTOGRAPHS DURING DATA COLLECTION**

